

TECHNICAL MEMORANDUM

To: Ian McAllister, Ashleigh Crompton, Mike Champion,
Jackie Boruch and Ryan Schucroft (Woodfibre LNG) **Date:** 9 May 2025

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

Subject: PE-111578 Weekly Discharge and Compliance Report #62 for April 27 – May 3

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 provides water quality database management and WDA compliance reporting services to Woodfibre LNG.

This technical memorandum (Report #62) was prepared by Lorax Environmental and summarizes WDA monitoring conducted for the period of April 27 – May 3. 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 #62 has been prepared to meet the requirements specified in Condition 4.2 of PE-111578:

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

Site layout and water management figures, and site images are included in Appendix A. Monitoring results are tabulated in Appendix B through Appendix G for contact water and treated water 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 in early 2024 construction of water management infrastructure commenced and has continued through the April 27 – May 3, 2025 monitoring period. Land-based construction occurs within two 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. Discharge to Howe Sound from the East and West Sedimentation Ponds commenced April and October 2024, respectively.

Non-contact water diversion ditches west of Mill Creek have been upgraded and discharge 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 from the diversion ditches is also conveyed to Howe Sound via station OUT-01. East of Mill Creek, non-contact water is diverted around the east catchment along pre-existing road ditches that flow to East Creek or Mill Creek. To facilitate the replacement of the East Creek discharge culvert at OUT-12 (station SW-04), the lower reach of East Creek was temporarily diverted to an adjacent culvert, OUT-11, on September 17, 2024.

The east and west catchments 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 and West Sedimentation Ponds for TSS settling prior to discharge.

Flocculant-based TSS settling systems are used at the East and West Sedimentation Ponds to remove TSS from non-contaminated contact water at the time of discharge. Some of the clarified water may be recirculated back to the ponds. The first West Sedimentation Pond TSS settling system (ESC) was commissioned for use on September 25, 2024, with an 820 m³/day installed capacity. A second TSS settling system (W500GPM) was added and commissioned for use on November 28 and provides an additional 2,725 m³/day installed capacity for clarifying water. A third TSS settling system (E500GPM) was commissioned for use at the East Sedimentation Pond on December 4, 2024, also with 2,725 m³/day installed capacity. Preparations are underway for the next stages of construction and include planned upgrades to water management in the east and

west catchments. The upgrades will consolidate the three TSS settling systems currently on site into a single high capacity system located adjacent to the West Sedimentation Pond and is expected to be implemented August 2025.

The West WWTP has been constructed, and pilot testing was conducted August and September 2024. Operation of the West WWTP was suspended September 25, 2024. The suspension was implemented for the temporary reconfiguration of the plant to conduct pilot-scale evaluation of alternative treatment processes for improving treatment outcomes. Any process modifications that may result from the pilot-scale evaluation will be submitted to BCER for approval prior to full-scale implementation. Site waters that require treatment will continue to be directed to the East WWTP while the operation of the West WWTP is suspended.

The East and West catchment permanent outfall structures have been completed; however, discharge from the East and West Sedimentation Ponds is controlled using pumps. Water stored in the sedimentation ponds is directed to a TSS settling system prior to discharge through the authorized outfall structures adjacent to each pond. In the east catchment, treated WWTP effluent is directed to the East Sedimentation Pond. Sedimentation pond effluent clarified through the E500GPM is discharged to Howe Sound at location SP-E-OUT. The west catchment discharge location, SP-W-OUT, receives the combined clarified effluents from the ESC and W500GPM TSS settling systems since November 28, 2024. Each of the authorized discharge locations (SP-E-OUT and SP-W-OUT) has an initial dilution zone (IDZ) where discharged water mixes with Howe Sound surface waters. The IDZ is defined in PE-111578 and extends 150 m from each point of discharge into Howe Sound.

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 monitoring period (April 27 – May 3), with a small amount of precipitation recorded on April 28 (6.2 mm), April 29 (1.4 mm), May 2 (2.8 mm), and May 3 (6.8 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
2025-04-27	0	17.2	6.7	Mix of Sun and Cloud
2025-04-28	6.2	12.0	7.8	Mix of Sun and Cloud
2025-04-29	1.4	15.4	7.8	Mix of Sun and Cloud
2025-04-30	0	16.8	7.1	Mix of Sun and Cloud
2025-05-01	0	18.8	7.1	Mix of Sun and Cloud
2025-05-02	2.8	22.4	8.9	Mix of Sun and Cloud
2025-05-03	6.8	15.0	7.6	Mix of Sun and Cloud

Note: Data retrieved from the Stantec Woodfibre site weather station.

From April 27 – May 3, the East Sedimentation Pond received non-contaminated contact water from Area 1100 north collection sump and recirculated water from the East WWTP and E500GPM TSS settling system (Appendix A, Figure 2). Non-contaminated contact waters from Area 4100 and Area 4200 collection sumps were directed to the West Sedimentation Pond, as well as recirculated water from the W500GPM and ESC TSS settling systems (Appendix A, Figure 3).

Routine operation of the East WWTP continued during the monitoring period (April 27 – May 3). Concrete contact waters were 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 (April 27 – May 3). Pond water clarified through the E500GPM TSS settling system and recirculated to the East Sedimentation Pond on May 2 and 3. Effluent was not discharged to Howe Sound (station SP-E-OUT) during the monitoring period. Daily water volumes processed by the East WWTP and the East TSS settling system (E500GPM) are provided in Appendix B (Table B-4).

West Sedimentation Pond water is clarified through the W500GPM TSS settling system prior to discharge. Pond water clarified through the W500GPM system was recirculated to the West Sedimentation Pond each day during the monitoring period (April 27 – May 3). The smaller ESC TSS settling system was operated April 27 and clarified effluent was recirculated to the West Sediment Pond. Effluent was not discharged to Howe Sound (station SP-W-OUT) during the monitoring period. Daily clarified effluent volumes from the TSS settling systems are provided in Appendix C (Table C-5).

2. Monitoring Summary

The locations of the compliance and supplementary 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.

Compliance and supplementary monitoring stations have been established:

- Non-contact diversion ditch outlet monitoring stations (OUT-01, OUT-02, OUT-06, and OUT-11). East Creek water was temporarily diverted to OUT-11 on September 17, 2024 and is monitored at the inlet to temporary diversion (station SW-04), therefore OUT-11 is not currently monitored.
- 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, E500GPM-IN, E500GPM-OUT, WWTP-E-IN, WWTP-E-OUT, SP-W-IN, ESC-W-IN, ESC-W-OUT, W500GPM-IN and W500GPM-OUT).

- Effluent compliance stations (SP-E-OUT and SP-W-OUT).
- Howe Sound reference and IDZ monitoring stations (WQR1, WQR2, IDZ-E1, IDZ-E2, IDZ-W1, and IDZ-W2).

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.

Two flocculant-based TSS settling systems are used at the West Sedimentation Pond (ESC and W500GPM). Influent and effluent are monitored for each system at stations ESC-W-IN, ESC-W-OUT, W500GPM-IN and W500GPM-OUT. One TSS settling system (E500GPM) is used at the East Sedimentation Pond. Influent and effluent are monitored at stations E500GPM-IN and E500GPM-OUT, respectively. The TSS settling system stations are supplemental to the PE-111578 monitoring requirements and are monitored at the discretion of field staff.

Water quality was monitored at stations SW-01, SW-02, SW-03, SW-04, SW-07, WWTP-E-IN, WWTP-E-OUT, SP-E-IN, E500GPM-IN, E500GPM-OUT, SP-W-IN, ESC-W-IN, ESC-W-OUT, W500GPM-IN, and W500GPM-OUT during the monitoring period (April 27 – May 3). Sampling dates and parameters tested are summarized in Table 2.

Overall, the PE-111578 monitoring requirements that were applicable during the monitoring period (April 27 – May 3) were met, with the exception of the weekly requirement for field and physical parameters at IDZ stations. Field and analytical samples were not collected at IDZ-E1, IDZ-E2, IDZ-W1, and IDZ-W2 stations during the monitoring period (April 27 – May 3) due to scheduling constraints and poor sea conditions. Two sampling events for IDZ stations are scheduled for the week of May 4 – May 10 to complete the spring high frequency (5-in-30) monitoring at the IDZ stations.

Daily field parameters and a weekly analytical sample were not collected at the east and west catchment effluent stations (SP-E-OUT and SP-W-OUT) during the monitoring period (April 27 – May 3) as there was no discharge on those days. Daily field parameters were not collected at WWTP-E-OUT on May 2 as there was no effluent discharging from the East WWTP at the time on 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.

Table 2: Summary of PE-111578 Monitoring Samples Collected April 27 – May 3.

Sampling Date	Sample	Description	Parameters Tested	Monitoring Frequency
April 27, 2025	SP-E-IN	East Sedimentation Pond influent entering the pond and collected at cell 1	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 entering the pond and collected at cell 1	Field Parameters.	D
	ESC-W-IN	Influent to the West Sedimentation Pond TSS settling system	Field Parameters.	P
	ESC-W-OUT	West TSS settling system effluent at the ESC meter box		
April 28, 2025	SP-E-IN	East Sedimentation Pond influent entering the pond and collected at cell 1	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 entering the pond and collected at cell 1	Field Parameters.	D
	W500GPM-IN	West Sedimentation Pond 500 GPM TSS settling system at the influent meter box	Field Parameters.	P
	W500GPM-OUT	West Sedimentation Pond 500 GPM TSS settling system at the effluent meter box	Field, Physical & General Parameters, VH & BTEX, EPHs & PAHs, Total, Dissolved and Speciated Metals, and VOCs.	P
	SW-02	Upper Reach of Mill Creek (upstream of the third bridge)	Field, Physical & General Parameters, VH & BTEX, EPHs & PAHs, Total, Dissolved and Speciated Metals, VOCs, Methylmercury, Dioxins & Furans.	M ₅
	SW-03	Mill Creek Estuary		
	SW-07	Upstream Mill Creek (at the diversion inlet)		
April 29, 2025	SP-E-IN	East Sedimentation Pond influent entering the pond and collected at cell 1	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 entering the pond and collected at cell 1	Field Parameters.	D
	SW-01	Lower Reach of Woodfibre Creek (near the mouth)	Field, Physical & General Parameters, VH & BTEX, EPHs & PAHs, Total, Dissolved and Speciated Metals, VOCs, Methylmercury, Dioxins & Furans	M ₅
	SW-04	Lower Reach of East Creek (near the outlet to the outfall culvert)		
April 30, 2025	SP-E-IN	East Sedimentation Pond influent entering the pond and collected at cell 1	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 entering the pond and collected at cell 1	Field Parameters.	D
May 1, 2025	SP-E-IN	East Sedimentation Pond influent entering the pond and collected at cell 1	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 entering the pond and collected at cell 1	Field Parameters.	D
	W500GPM-IN	West Sedimentation Pond 500 GPM TSS settling system at the influent meter box	Field Parameters.	P
	W500GPM-OUT	West Sedimentation Pond 500 GPM TSS settling system at the effluent meter box		
May 2, 2025	SP-E-IN	East Sedimentation Pond influent entering the pond and collected at cell 1	Field, Physical & General Parameters, VH & BTEX, EPHs & PAHs, Total, Dissolved and Speciated Metals, VOCs, Methylmercury, Dioxins & Furans.	D, W ₁ , W ₂
	WWTP-E-IN	East WWTP at the influent meter box	Field Parameters.	D
	SP-W-IN	West Sedimentation Pond influent entering the pond and collected at cell 1	Field, Physical & General Parameters, VH & BTEX, EPHs & PAHs, Total, Dissolved and Speciated Metals, VOCs, Methylmercury, Dioxins & Furans.	D, W ₁ , W ₂
	W500GPM-IN	West Sedimentation Pond 500 GPM TSS settling system at the influent meter box	Field Parameters.	P
	W500GPM-OUT	West Sedimentation Pond 500 GPM TSS settling system at the effluent meter box		
May 3, 2025	SP-E-IN	East Sedimentation Pond influent entering the pond and collected at cell 1	Field Parameters.	D
	WWTP-E-IN	East WWTP at the influent meter box	Field, Physical & General Parameters, VH & BTEX, EPHs & PAHs, Total, Dissolved and Speciated Metals, VOCs, Methylmercury, Dioxins & Furans.	D, W ₁ , W ₂
	WWTP-E-OUT	East WWTP at the effluent meter box		
	E500GPM-IN	East Sedimentation Pond 500 GPM TSS settling system at the influent meter box	Field Parameters.	P
	E500GPM-OUT	East Sedimentation Pond 500 GPM TSS settling system at the effluent meter box		
	SP-W-IN	West Sedimentation Pond influent entering the pond and collected at cell 1	Field Parameters.	D
	W500GPM-IN	West Sedimentation Pond 500 GPM TSS settling system at the influent meter box	Field Parameters.	P
	W500GPM-OUT	West Sedimentation Pond 500 GPM TSS settling system at the effluent meter box		

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.
M₅ – spring high frequency (5-in-30) sampling for receiving environment stations.
W₁ – initial high frequency monitoring for physical parameters at WWTP and sedimentation pond influent and effluent stations.
W₂ – initial high frequency monitoring for all parameters at WWTP and sedimentation pond influent and effluent stations.
W₃ – initial high frequency monitoring for physical parameters at IDZ stations.
P – periodic monitoring for targeted parameters that is supplementary to PE-111578 requirements.

3. Water Quality Results

3.1 Screening and Reporting Overview

Water quality and flow monitoring results are screened against field quality control (QC) criteria, benchmark values, operational minimum discharge objectives (MDOs) that the WWTPs are currently being operated to meet, PE-111578 discharge limits, as well as Canadian, Federal 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.

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 methylmercury WQG to support the interpretation of total mercury and methylmercury results.

3.2 Summary of Reported Results

Field measurements and analytical results included in this weekly report (Report #62) are listed below in Table 3. Testing for methylmercury, dioxins and furans typically requires up to four weeks 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-E-IN, SP-E-OUT, WWTP-E-IN, WWTP-E-OUT, SP-W-IN, and SP-W-OUT collected March 24 (dioxins and furans)
- IDZ-E1, IDZ-E2, IDZ-W1, IDZ-W2, WQR1, WQR2 collected March 25 at 0.5 m below surface (chronic toxicity)
- SP-W-IN and SP-W-OUT collected March 31 (dioxins and furans)
- SP-E-IN, SP-E-OUT, WWTP-E-IN, and WWTP-E-OUT collected April 1 (dioxins and furans)
- SW-01, SW-02, SW-03, SW-04, and SW-07 collected April 2 (dioxins and furans)
- SW-02, SW-03, SW-07 collected April 7 (dioxins and furans)
- SW-01 and SW-04 collected April 8 (dioxins and furans)
- IDZ-W1 and IDZ-W2 collected April 8 (dioxins and furans)
- SP-E-IN, SP-E-OUT, WWTP-E-IN, WWTP-E-OUT, SP-W-IN, and SP-W-OUT collected April 9 (dioxins and furans)
- IDZ-E1 and IDZ-E2 collected April 10 (dioxins and furans)
- OUT-01, OUT-02, and OUT-06 collected April 11 (methylmercury)
- WQR1 and WQR2 collected April 11 (dioxins and furans)
- SW-02, SW-03, and SW-07 collected April 12 (dioxins and furans)
- SW-01 and SW-04 collected April 13 (dioxins and furans)
- IDZ-W1, IDZ-W2, WQR2 collected April 13 (dioxins and furans)
- IDZ-E1, IDZ-E2, WQR1 collected April 14 (dioxins and furans)
- SP-E-IN, SP-E-OUT, SP-W-IN, SP-W-OUT collected April 16 (dioxins and furans)
- WWTP-E-IN and WWTP-E-OUT collected April 19 (dioxins and furans)
- SW-02, SW-03, and SW-07 collected April 20 (methylmercury, dioxins and furans)
- SP-W-IN and SP-W-OUT collected April 21 (dioxins and furans)

- IDZ-W1, IDZ-W2, and WQR2 collected April 21 (methylmercury, dioxins and furans)
- SW-01 and SW-04 collected April 22 (dioxins and furans)
- IDZ-E1, IDZ-E2, and WQR1 collected April 23 (methylmercury, dioxins and furans)
- SP-E-IN, SP-E-OUT, WWTP-E-IN, and WWTP-E-OUT collected April 24 (dioxins and furans)
- SW-02, SW-03, and SW-07 collected April 28 (field and all analytical parameters)
- SW-01 and SW-04 collected April 29 (field and all analytical parameters)
- SP-E-IN and SP-W-IN collected May 2 (dioxins and furans)
- WWTP-E-IN and WWTP-E-OUT collected May 3 (all analytical parameters)

Table 3: Summary of Analytical Results Included in Weekly Discharge and Compliance Report #62.

Sample	Description	Sampling Date	Parameters Reported
OUT-02	Non-contact water diversion ditch outlet	April 16, 2025	Methylmercury.
SW-02	Upper Reach of Mill Creek (upstream of the third bridge)	April 20, 2024	Field, Physical and General Parameters, Total and Dissolved Metals, Hexavalent Chromium, PAHs, and VOCs.
SW-03	Mill Creek Estuary		
SW-07	Upstream Mill Creek (at the diversion inlet)		
SW-01	Lower Reach of Woodfibre Creek (near the mouth)	April 22, 2024	Field, Physical and General Parameters, Total and Dissolved Metals, Hexavalent Chromium, PAHs, VOCs, and Methylmercury.
SW-04	Lower Reach of East Creek (near the outlet to the outfall culvert)		Field, Physical and General Parameters, Total and Dissolved Metals, Hexavalent Chromium, and Methylmercury.
OUT-02	Non-contact water diversion ditch outlet		
IDZ-E1-0.5	Howe Sound IDZ station E1; 0.5 m below surface	April 23, 2024	Field, Physical and General Parameters, Total and Dissolved Metals, Hexavalent Chromium, PAHs, and VOCs.
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 entering the pond and collected at cell 1	April 24, 2024	Methylmercury.
SP-E-OUT	East Sedimentation Pond clarified effluent discharge to Howe Sound, collected at the manhole adjacent to the outfall		
WWTP-E-IN	East WWTP at the influent meter box		
WWTP-E-OUT	East WWTP at the effluent meter box	April 28, 2024	Field, Physical and General Parameters, Total and Dissolved Metals, Hexavalent Chromium, PAHs, and VOCs.
W500GPM-OUT	West Sedimentation Pond 500 GPM TSS settling system at the effluent meter box		
SP-E-IN	East Sedimentation Pond influent entering the pond and collected at cell 1	May 2, 2024	Field, Physical and General Parameters, Total and Dissolved Metals, Hexavalent Chromium, PAHs, VOCs, and Methylmercury.
SP-W-IN	West Sedimentation Pond influent entering the pond and collected at cell 1		

3.3 East Catchment

The east catchment water quality monitoring results for stations at the East Sedimentation Pond, East WWTP and the authorized discharge location are discussed in this section. Results for the sedimentation pond and authorized discharge location are screened against PE-111578 discharge limits. Parameters without a discharge limit are screened against Canadian, Federal and BC WQGs for the protection of marine water aquatic life. East WWTP monitoring results are screened against operational MDOs which are equivalent to the PE-111578 discharge limits and the lowest applicable WQGs for parameters without discharge limits. The screened water quality results for analytical samples available at the time of reporting and for field parameters collected during the monitoring period are presented in Appendix B. Exceedances of PE-111578 discharge limits and WQGs in samples of effluent discharged to Howe Sound and results received for methylmercury, dioxins and furans are summarized below.

During the monitoring period (April 27 – May 3), the TSS settling system (E500GPM) treated water stored in the East Sedimentation Pond each day and produced clarified effluent that was recirculated to the pond. The east catchment did not discharge during the monitoring period. Daily clarified effluent volumes, East WWTP treated effluent volumes, and discharge volumes from the east catchment are listed in Appendix B, Table B-4.

Field measurements were collected April 27 – May 3 at multiple influent and effluent locations, as outlined in Section 2, and are tabulated in Appendix B, Table B-3. The analytical sample collected on May 2 (station SP-E-IN) was available at the time of reporting. Screening results for east catchment contact water quality are summarized in Table B-1 of Appendix B.

Methylmercury analytical results were available at the time of reporting for East Sedimentation Pond influent (SP-E-IN) collected April 24 and May 2 and effluent discharged at SP-E-OUT on April 24 (as discussed in Report #61). Methylmercury results were also available for East WWTP influent and effluent (WWTP-E-IN and WWTP-E-OUT, respectively) collected April 24 (as discussed in Report #61). The methylmercury concentrations in the effluent discharged at SP-E-OUT on April 24 was 0.000264 µg/L (Appendix B, Table B-2). Methylmercury results and the corresponding total mercury results were above the respective WQGs (see Section 3.1) in the SP-E-OUT sample collected April 24 (Table 4). Methylmercury and total mercury were above the MDO in East WWTP effluent (WWTP-E-OUT) collected April 24 (Appendix B, Table B-2). East WWTP treated effluent is directed to the East Sedimentation Pond.

Table 4: Summary of Parameters Exceeding WQGs in Effluent Discharged from SP-E-OUT for Results Available at the Time of Reporting

Parameter	Units	WQG ¹	N	N >WQG	Commentary
Total mercury	µg/L	0.0032	1	1	Total mercury measured at station SP-E-OUT on April 24 (0.00851 µg/L) was 2.6 times greater than the calculated WQG.
Methylmercury	µg/L	0.0001	1	1	Methylmercury measured at station SP-E-OUT on April 24 (0.000264 µg/L) was 2.6 times greater than the WQG.

N = number of samples.

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

3.4 West Catchment

The west catchment water quality monitoring results for stations at the West Sedimentation Pond, the TSS settling systems (ESC and W500GPM) and West WWTP monitoring stations, and the authorized discharge location are discussed in this section. Results for sedimentation pond and TSS settling system influent and effluent stations are screened against PE-111578 discharge limits. Parameters without a discharge limit are screened against Canadian, Federal and BC WQGs for the protection of marine water aquatic life. The screened water quality results for analytical samples and field parameters are presented in Appendix C. Operation of the West WWTP is currently suspended (refer to Section 1.1) and monitoring results are therefore not available for this facility. Exceedances of PE-111578 discharge limits and WQGs in samples of effluent discharged to Howe Sound and results received for methylmercury, dioxins and furans are summarized below.

During the monitoring period (April 27 – May 3), the TSS settling system (W500GPM) treated water stored in the West Sedimentation Pond each day and produced clarified effluent that was recirculated to the pond. The smaller TSS settling system (ESC) was operational on April 27 and clarified effluent was recirculated to the pond. The west catchment did not discharge to Howe Sound during the monitoring period. Daily clarified effluent and discharge volumes from the west catchment are summarized in Appendix C, Table C-5.

Field measurements were collected April 27 – May 3 at multiple influent and effluent locations, as outlined in Section 2, and are tabulated in Appendix C, Table C-4. Analytical samples collected April 28 (station W500GPM-OUT) and May 2 (station SP-W-IN) were available at the time of reporting. Screening results for west catchment contact water quality are tabulated in Table C-1 and Table C-2 of Appendix C.

Methylmercury analytical results were available at the time of reporting for West Sedimentation Pond influent (SP-W-IN) collected on May 2. Results are tabulated in Appendix C, Table C-3.

3.5 Non-Contact Water Diversion Ditch Outlets

Non-contact water diversion ditch samples are screened against Canadian, Federal and BC WQGs for the protection of freshwater aquatic life. The analytical results, field parameters, and WQGs are summarized in Appendix D.

East Creek was temporarily diverted to OUT-11 on September 17 to facilitate replacement of the OUT-12 culvert through which East Creek previously discharged. Only East Creek water is flowing through the OUT-11 culvert. East Creek is monitored at freshwater receiving environment station SW-04 and station OUT-11 is not monitored while diversion is in place.

Analytical results were available at the time of reporting for the April 22 non-contact water diversion ditch outlet sample collected at station OUT-02. Parameter concentrations met WQGs except total aluminum (0.159 mg/L) and dissolved copper (0.00044 mg/L). The total aluminum and dissolved copper results are below the maximum concentrations (0.43 and 0.00095 mg/L, respectively) observed during baseline monitoring of diversion ditch water quality. The measured concentrations are considered to represent natural conditions for non-contact waters, therefore the total aluminum and dissolved copper results are not flagged as project influenced exceedances of the WQGs.

Methylmercury results were available at the time of reporting for non-contact water diversion ditch samples collected April 16 and 22 at OUT-02 (as discussed in Reports #60 and #61). In the non-contact water diversion ditch samples collected April 16 and 22, the methylmercury concentrations were 0.000021 and <0.000020 µg/L, respectively. Methylmercury results met the WQG. The corresponding total mercury results also met WQGs. Results are tabulated in Appendix D, Table D-2.

3.6 Freshwater and Estuarine Water Receiving Environment

Freshwater and estuarine water receiving environment samples are screened against Canadian, Federal and BC WQGs for the protection of freshwater and estuarine aquatic life. Parameter concentrations above a WQG value, but within the range of values observed in the baseline monitoring program are considered to represent the natural condition of the water and are not flagged as a possible indicator of project influence. The analytical results, field parameters, and WQGs are summarized in Appendix E (freshwater) and Appendix F (estuarine).

Analytical results were available at the time of reporting for freshwater and estuarine water samples collected the near the mouth of Mill Creek (SW-02), the Mill Creek estuary (SW-03) and upstream on Mill Creek (SW-07) on April 20 as well as near the mouth Woodfibre Creek and East Creek (stations SW-01 and SW-04, respectively) on April 22 (as discussed in Report #61). The

aforementioned freshwater and estuarine water samples reflect the fourth sampling event for the spring high frequency monitoring (5-in-30) requirement.

Parameter concentrations met WQGs except field pH, total aluminum and dissolved copper in one or more samples. Field pH was below the lower range of the WQG in the Mill Creek Estuary (SW-03; pH 6.7). Total aluminum was above the long-term WQG in all of the samples collected from Woodfibre Creek, Mill Creek, and East Creek (SW-01, SW-02, SW-04, and SW-07) and ranged from 0.0752 to 0.162 mg/L. Dissolved copper was above the calculated long-term WQG in samples collected at SW-04 on April 22 (0.00035 mg/L).

The observed field pH, total aluminum and dissolved copper concentrations are within ranges observed in the pre-construction baseline monitoring program for the freshwater and estuarine water receiving environment stations. The samples collected from upstream Mill Creek (station SW-07) represent background water quality in Mill Creek. The observed field pH, total aluminum and dissolved copper concentrations are considered to represent background conditions in all samples and are not flagged as potential project-influenced exceedances of the WQGs.

Methylmercury results were available at the time of reporting for freshwater samples collected at Woodfibre Creek (SW-01) and East Creek (SW-04) on April 22 (as discussed in Report #61). The methylmercury concentrations were <0.000020 µg/L in the samples collected from stations SW-01 and SW-04. Methylmercury results met the WQG. The corresponding total mercury results also met WQGs. Results are tabulated in Appendix E, Table E-2.

3.7 Marine Water Receiving Environment

Marine water receiving environment samples are screened against Canadian, Federal and BC WQGs for the protection of marine water aquatic life. Parameter concentrations above a WQG value, but within the range of values observed in the baseline monitoring program or reference stations are considered to represent the natural condition of the water and not flagged as a possible indicator of project influence. Similarly, WQG exceedances at marine reference stations are considered to represent background conditions that are not influenced by the project. It is expected that 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. The analytical results, field parameters and WQGs are summarized in Appendix G.

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 April 23 at IDZ-E1, IDZ-E2, and marine reference station WQR1 (as discussed in Report #61). The aforementioned marine water samples reflect the third sampling event for the spring high

frequency monitoring (5-in-30) requirement at IDZ-E1, IDZ-E2, and marine reference station WQR1.

Parameter concentrations met WQGs except dissolved oxygen and total boron in some samples (Appendix G; Tables G-1 and G-2). In samples collected at 2 m above the seafloor at IDZ-E2 and marine reference station WQR1, dissolved oxygen was below the lower limit of the WQG (8 mg/L) and was 7.30 and 7.28 mg/L, respectively. In most of the samples collected at 2 m below surface and 2 m above the seafloor at IDZ and marine reference stations, total boron was above the WQG (1.2 mg/L) and ranged from 1.22 to 3.59 mg/L. 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 concentrations that have been observed in the pre-construction baseline monitoring program or within background ranges observed at marine reference stations and are therefore not attributed to project influence.

4. Quality Control

This section presents the results of the quality control (QC) evaluation for the PE-111578 weekly report (Table 5). The evaluation includes a review of field and lab QC, completeness of the weekly report (*e.g.*, pending data), completeness of the monitoring program, confirmation of recordkeeping, evaluation of compliance and review of water management activities. Items flagged for follow-up in Section 3 are also tracked in Table 5. Any items flagged for follow-up are carried forward to future reports until they are closed.

Table 5: Weekly Report QC Evaluations and Ongoing Items

QC Procedure	Observation	Investigation/Resolution
Reporting Period (April 27 – May 3, Report #62)		
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 has been temporarily diverted through OUT-11 outfall since September 17, 2024, to facilitate replacement of the East Creek outfall culvert (OUT-12). 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.
Discharge WQG Evaluation	Total mercury and methylmercury above WQG	Total mercury and methyl mercury measured at station SP-E-OUT on April 24 (0.00851 and 0.000264 µg/, respectively) were 2.6 times greater than the calculated WQG. Potential sources are being reviewed. This item remains open.
Pending Data	Analytical results not reported.	Analytical results and field parameters for receiving environment samples collected April 28 and 29 as well as analytical results for contact water and treated water samples collected May 3 were not included with Report #62. Dioxins and furans results for contact water and treated water samples collected May 2 were not included with Report #62. The pending results will be included in future weekly reports when available. This item remains open.
Ongoing Items from Previous Weekly Reports		
Report #57: Pending Data	Analytical results not reported.	Dioxins and furans results for contact water samples collected March 24 and chronic toxicity results for marine receiving environment samples collected March 25 were not included with Report #62. The pending results will be included in future weekly reports when available. This item remains open.
Report #58: Pending Data	Analytical results not reported.	Dioxins and furans results for contact water samples collected March 31, April 1, and April 2 were not included with Report #62. The pending results will be included in future weekly reports when available. This item remains open.
Report #59: Pending Data	Analytical results not reported.	Dioxins and furans results for contact water samples collected April 9 and receiving environment samples collected April 7, 8, 10, 11, and 12 were not included with Report #62. The pending results will be included in future weekly reports when available. This item remains open.
Report #60: Pending Data	Analytical results not reported.	Dioxins and furans results for receiving environment, contact water, and treated water samples collected April 13, 14, 16, and 19 were not included with Report #62. The pending results will be included in future weekly reports when available. This item remains open.
Report #61: Non-compliant Discharge	Total copper and total zinc exceeded discharge limits	Non-compliant effluent was discharged from SP-W-OUT on April 21, with total copper (0.0071 mg/L) and total zinc (0.0222 mg/L) both 1.7 times above their corresponding discharge limits. Outcomes have been communicated to BCER. This item is closed.
Report #61: Potential Project Influence	Dissolved copper at East Creek above the WQG and the baseline concentration range.	Dissolved copper concentration (0.00139 mg/L) observed at the East Creek station (SW-04) on April 8 was above the WQG and 1.3 times greater than the maximum concentration observed in the pre-construction baseline monitoring program (0.00105 mg/L). Background dissolved copper data collected for another monitoring program (the marine water quality management and monitoring plan) from April 2024 to February 2025 at East Creek Station SW-09, located upstream of potential project influence, have ranged from <0.0002 to 0.00137 mg/L. The background station data indicate the April 8 result at SW-04 (0.00139 mg/L) is likely representative of natural conditions and is not indicative of project influence. This item is closed.
Report #62: WWTP Performance Evaluation	Field pH, total copper, total mercury, total zinc, and hexavalent Cr above the MDO	<p>This item was first noted in Report #46 (January 8 sample) and has been updated with January 14 results (Report #47), January 24 and January 28 results (Report #49), February 5 and 6 results (Report #50), February 10 results (Report #51), February 15 and 20 results (Report #52), February 24 results (Report #53), March 8 results (Report #55), March 17 results (Report #56), and April 24 results (Reports #61 and #62). The total copper concentrations were 0.00809, 0.00595, 0.00895, 0.00518, 0.00542, 0.00525, 0.00450, and 0.00734 mg/L in samples collected at WWTP-E-OUT on January 8, 14, 24, 28, February 24, March 8, 17, and April 24, respectively, and ranged from 0.00613 to 0.0108 mg/L in four replicate samples collected on February 15. The total mercury concentrations were 0.0355, 0.185, 0.223, 0.0882 and 0.0101 µg/L in samples collected on January 24, 30, February 20, 24, and April 24 respectively, and were 0.0615 and 0.0644 mg/L in two replicate samples collected February 15. The total zinc concentrations were 0.0137, 0.0152, and 0.0156 mg/L in the samples collected on January 24, February 20 and 24, and were 0.0223 and 0.0234 mg/L in two of four replicate samples collected February 15. Hexavalent chromium concentrations were 0.00197 and 0.00166 mg/L in samples collected January 24 and 28 at WWTP- E-OUT. Field pH was 9.1, 9.2, and 9.6 in samples collected at WWTP-E-OUT on February 5, 6 and 10, respectively.</p> <p>Review of possible causes has yielded inconclusive results. As of May 3, field pH and total metals have been consistently meeting MDOs except total copper and total mercury. This item remains open.</p>
Report #61: Pending Data	Analytical results not reported.	Analytical results and field parameters for receiving environment and diversion ditch samples collected April 20, 22, and 23 are discussed in Section 3.5, 3.6, and 3.7 of Report #62. Methylmercury results for contact water samples collected April 24 are discussed in Section 3.3 of Report #62. Methylmercury, dioxins and furans results for receiving environment, contact water and treated water samples collected April 20, 21, 22, 23, and 24 were not included with Report #62. The pending results will be included in future weekly reports when available. This item remains open.
Report #61: Data QC	Total copper and total zinc measured in some marine receiving environment samples are higher than other samples collected on those days.	Laboratory reanalysis did not confirm the originally report results for total copper measured at IDZ-W1 at 2m below the surface on April 13 and total zinc measured at marine reference station WQR1 at 2 m above the seafloor on April 11 in Report #61. Corrected analytical results for total copper at IDZ-W1-2m on April 13 was 0.00063 mg/L and for total zinc at WQR1-SF was <0.0030 mg/L. Concentrations are within pre-construction baseline ranges or reflect background values and are therefore not reported as exceedances. This item is closed.

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.

5. 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**



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



Appendix A: Figures and Site Images



World Imagery: District of Squamish. Additional imagery provided by McDermott International captured April 28th, 2025.

LEGEND

- Freshwater Monitoring Station
- Marine Water Monitoring Station
- Certified Project Area
- Watercourse
- East Creek Temporary Diversion
- Non Contact Ditch
- Outfall / Culvert / Pipeline
- Clean Water Diversion Discharge Station
- Sedimentation Pond Monitoring Stations (Water Quality)
- Wastewater Treatment Plant (WWTP)

DATE SAVED: May 08, 2025
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 50 100 150 Metres

CLIENT:



PROJECT:

Woodfibre LNG Project Construction Phase

TITLE:

Water Management Facilities and Established PE-111578 Monitoring Stations (May 3, 2025)

PROJECT #:

A633-7

FIGURE:

1

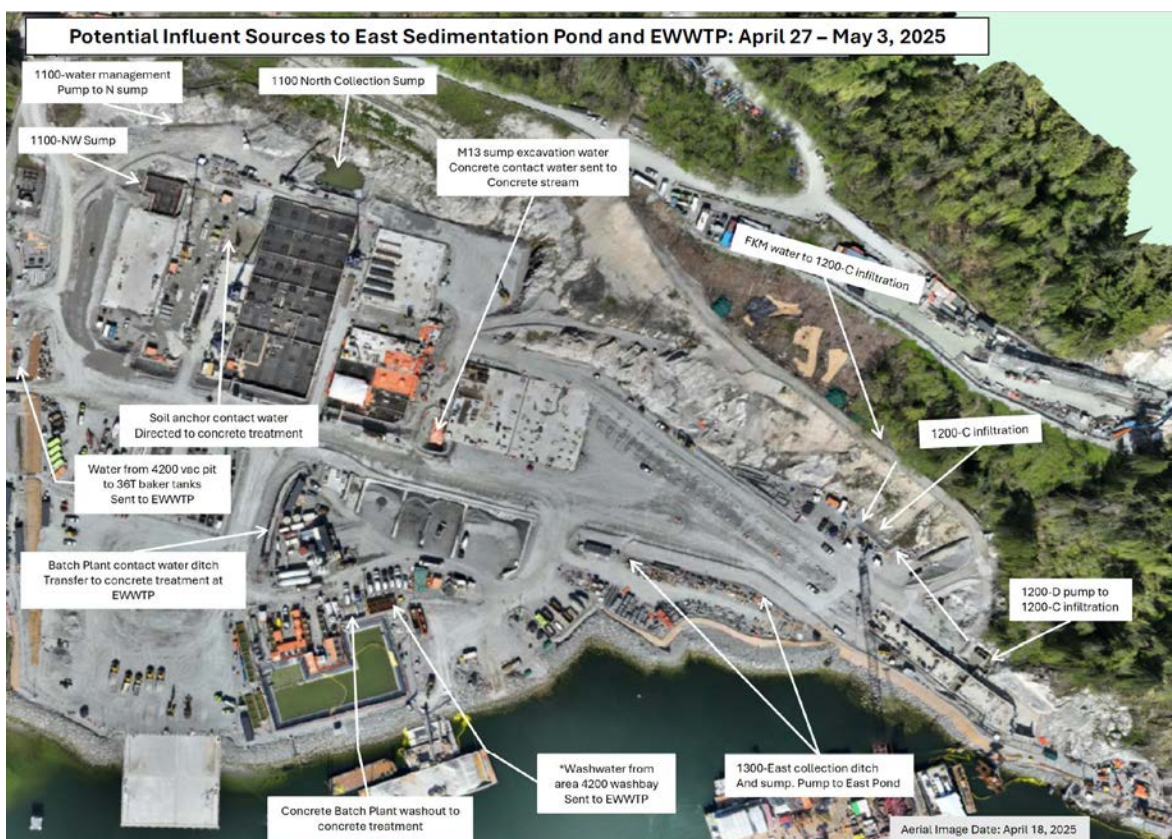


Figure 2: East Catchment contact water management facilities (April 27 – May 3).

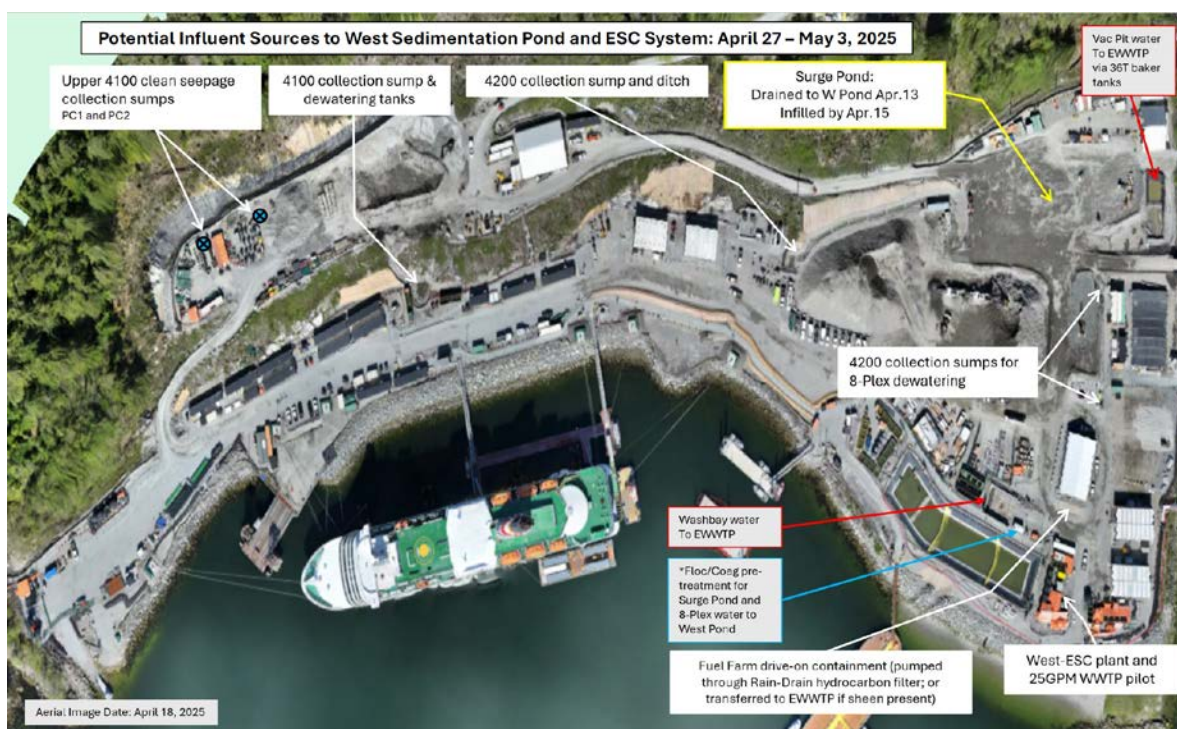


Figure 3: West Catchment contact water management facilities (April 27 – May 3).



Figure 4: Aerial view of the East Sedimentation Pond (May 2, 2025). The East WWTP is located on the left side and the E500GPM TSS settling system is situated along the bottom edge of the pond.



Figure 5: Aerial view of the West Sedimentation Pond (May 2, 2025). The TSS settling systems are located to the left (W500GPM) and right (ESC) of the pond.

Appendix B: East Catchment Monitoring Results

Table B-1: East Catchment Contact Water Influent Analytical Results Received at the Time of Reporting.

Parameter	Unit	Lowest Applicable Guideline ¹		PE-111578 Discharge Limit	Station SP-E-IN
					Influent
					SP-E-IN
		Long Term	Short Term		VA25B0096-001
		2025-05-02 14:15			
General Parameters					
pH - Field	pH units	- ²	-	5.5 - 9.0	7.1
Conductivity - Field	µS/cm	-	-	-	1129
Temperature - Field	°C	-	-	-	17.6
Salinity - Field	ppt	-	-	-	0.66
Turbidity - Field	NTU	-	-	-	26.98
TSS	mg/L	-	-	25 or 75 ⁶	24.9
Dissolved Oxygen - Field	mg/L	≥8	-	-	9.22
Anions and Nutrients					
Sulphate	mg/L	-	-	-	334
Chloride	mg/L	-	-	-	16.9
Fluoride	mg/L	-	1.5	-	0.371
Ammonia (N-NH ₃)	mg/L	14 ³	92 ³	-	<0.0050
Nitrite (N-NO ₂)	mg/L	-	-	-	<0.0050
Nitrate (N-NO ₃)	mg/L	3.7	339	-	<0.0250
Total Metals					
Aluminum, total (T-Al)	mg/L	-	-	-	2.05
Antimony, total (T-Sb)	mg/L	-	0.27 ⁴	-	0.00132
Arsenic, total (T-As)	mg/L	0.0125	0.0125	-	0.00284
Barium, total (T-Ba)	mg/L	-	-	-	0.0242
Beryllium, total (T-Be)	mg/L	0.1	-	-	0.000037
Boron, total (T-B)	mg/L	1.2	-	-	0.08
Cadmium, total (T-Cd)	mg/L	0.00012	-	-	<0.0000900
Chromium, total (T-Cr)	mg/L	-	-	-	0.00288
Cobalt, total (T-Co)	mg/L	-	-	-	0.00057
Copper, total (T-Cu)	mg/L	- ²	- ²	0.0043	0.00852
Iron, total (T-Fe)	mg/L	-	-	-	1.43
Lead, total (T-Pb)	mg/L	- ²	- ²	0.0035	0.00347
Manganese, total (T-Mn)	mg/L	-	-	-	0.0748
Mercury, total (T-Hg)	mg/L	0.000016 ⁵	-	-	0.0000613
Molybdenum, total (T-Mo)	mg/L	-	-	-	0.142
Nickel, total (T-Ni)	mg/L	0.0083	-	-	0.00082
Selenium, total (T-Se)	mg/L	0.002	-	-	0.000522
Silver, total (T-Ag)	mg/L	0.0005	0.0037	-	0.000016
Thallium, total (T-Tl)	mg/L	-	-	-	0.000036
Uranium, total (T-U)	mg/L	-	-	-	0.0389
Vanadium, total (T-V)	mg/L	- ²	-	0.0081	0.00564
Zinc, total (T-Zn)	mg/L	- ²	- ²	0.0133	0.0108
Hexavalent Chromium, total	mg/L	0.0015	-	-	<0.00050
Dissolved Metals					
Cadmium, dissolved (D-Cd)	mg/L	-	-	-	<0.0000600
Copper, dissolved (D-Cu)	mg/L	-	-	-	0.00256
Iron, dissolved (D-Fe)	mg/L	-	-	-	0.023
Lead, dissolved (D-Pb)	mg/L	-	-	-	0.000096
Manganese, dissolved (D-Mn)	mg/L	-	-	-	0.0383
Nickel, dissolved (D-Ni)	mg/L	-	-	-	<0.00050
Strontium, dissolved (D-Sr)	mg/L	-	-	-	0.111
Vanadium, dissolved (D-V)	mg/L	-	-	-	0.00283
Zinc, dissolved (D-Zn)	mg/L	-	-	-	0.0015
Polycyclic Aromatic Hydrocarbons (PAHs)					
Acenaphthene	mg/L	0.006	-	-	<0.000010
Acridine	mg/L	-	-	-	<0.000010
Anthracene	mg/L	-	-	-	<0.000010
Benz(a)anthracene	mg/L	-	-	-	0.000015
Benzo(a)pyrene	mg/L	0.00001	-	-	0.0000108
Chrysene	mg/L	0.0001	-	-	0.000014
Fluoranthene	mg/L	-	-	-	0.000022
Fluorene	mg/L	0.012	-	-	<0.000010
1-methylnaphthalene	mg/L	0.001	-	-	<0.000010
2-methylnaphthalene	mg/L	0.001	-	-	<0.000010
Naphthalene	mg/L	0.001	-	-	<0.000050
Phenanthrene	mg/L	-	-	-	<0.000020
Pyrene	mg/L	-	-	-	0.00002
Quinoline	mg/L	-	-	-	<0.000050
Volatile Organic Compounds (VOCs)					
Benzene	mg/L	0.11	-	-	<0.00050
Ethylbenzene	mg/L	0.25	-	-	<0.00050
Methyl-tert-butyl-ether	mg/L	5	0.44	-	<0.00050
Styrene	mg/L	-	-	-	<0.00050
Toluene	mg/L	0.215	-	-	<0.00040
Total Xylenes	mg/L	-	-	-	<0.00050
Chlorobenzene	mg/L	0.025	-	-	<0.00050
1,2-Dichlorobenzene	mg/L	0.042	-	-	<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. Results in orange text exceeded the PE-111578 East Sedimentation Pond Discharge Limit. The East Catchment did not discharge during the monitoring period (April 27 – May 3).
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 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.

Table B-2: 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	0.0032 – 0.0094 ^{3,4}
Station	Water Type	Sample ID	Lab ID	Sampling Date		
Influent						
SP-E-IN	Influent	SP-E-IN	VA25A9268-003	2025-04-24	<u>0.000584</u>	<u>0.0223</u>
SP-E-IN	Influent	SP-E-IN	VA25B0096-001	2025-05-02	<u>0.000651</u>	<u>0.0613</u>
WWTP-E-IN	Influent	WWTP-E-IN	VA25A9268-001	2025-04-24	<u>0.000218</u>	<u>0.0124</u>
Effluent						
SP-E-OUT	Effluent	SP-E-OUT	VA25A9268-004	2025-04-24	<u>0.000264</u>	<u>0.00851</u>
WWTP-E-OUT	Effluent	WWTP-E-OUT	VA25A9268-002	2025-04-24	<u>0.000275</u>	<u>0.0101</u>

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.

Table B-3: East Catchment Field Measurements Collected During the Monitoring Period (April 27 – May 3).

Parameter			Temp.	Dissolved Oxygen (DO)	Salinity	Turbidity	Estimated TSS ³	pH	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	2025-04-27 10:32	17.1	9.23	0.43	5.75	7.3	6.8	741	No
SP-E-IN	Influent	2025-04-28 13:57	16.8	9.26	0.47	6.59	7.9	7.1	801	No
SP-E-IN	Influent	2025-04-29 14:24	16.4	9.63	0.45	2.88	5.1	6.4	764	No
SP-E-IN	Influent	2025-04-30 12:52	18.8	9.87	0.48	19.45	17.5	7.0	854	No
SP-E-IN	Influent	2025-05-01 12:49	18.1	9.78	0.53	14.88	14.1	6.7	932	No
SP-E-IN	Influent	2025-05-02 14:11	19.7	9.05	0.64	26.74	22.9	7.0	1149	No
SP-E-IN	Influent	2025-05-02 14:15	17.6	9.22	0.66	26.98	23.1	7.1	1129	No
SP-E-IN	Influent	2025-05-03 15:23	18.4	9.03	0.65	15.65	14.7	6.7	1135	No
WWTP-E-IN	Influent	2025-04-27 10:22	16.4	10.23	0.42	4.38	6.3	7.0	717	No
WWTP-E-IN	Influent	2025-04-28 14:05	16.5	9.90	0.44	7.36	8.5	7.2	742	No
WWTP-E-IN	Influent	2025-04-29 13:25	16	10.04	0.45	4.80	6.6	7.0	749	No
WWTP-E-IN	Influent	2025-04-30 14:34	15.5	<u>6.42</u>	0.47	4.73	6.5	6.8	769	No
WWTP-E-IN	Influent	2025-05-01 12:43	17.0	10.22	0.5	13.65	13.2	6.8	860	No
WWTP-E-IN	Influent	2025-05-02 10:10	16.4	<u>6.76</u>	0.76	3.26	5.4	8.5	1257	No
WWTP-E-IN	Influent	2025-05-03 15:00	18.1	9.41	0.62	26.14	22.5	7.2	1068	No
E500GPM-IN	Influent	2025-05-03 15:27	18.5	9.31	0.62	23.27	20.4	7.3	1089	No
Effluent ⁵										
WWTP-E-OUT	Effluent	2025-04-27 10:28	17.2	8.55	0.45	1.51	4.1	6.5	773	No
WWTP-E-OUT	Effluent	2025-04-28 14:02	16.5	8.52	0.49	1.84	4.4	6.7	830	No
WWTP-E-OUT	Effluent	2025-04-29 13:29	15.6	8.57	0.45	1.77	4.3	6.2	754	No
WWTP-E-OUT	Effluent	2025-04-30 14:39	15.8	- ⁷	0.43	2.10	4.6	6.9	722	No
WWTP-E-OUT	Effluent	2025-05-01 12:54	16.9	8.87	0.56	1.78	4.3	6.3	954	No
WWTP-E-OUT	Effluent	2025-05-03 15:20	17.7	8.56	0.71	4.57	6.4	6.0	1208	No
E500GPM-OUT	Effluent	2025-05-03 15:30	18.1	8.94	0.62	3.62	5.7	7.4	1074	No

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.
Results in orange text exceeded the PE-111578 East Sedimentation Pond Discharge Limit.
¹ The lowest applicable guidelines from approved or working BC WQGs, Canadian (CCME) WQGs and Federal WQGs.
² The WQG was not evaluated for parameters with discharge limits.
³ TSS concentration is estimated from field turbidity measurements using a site-specific relationship TSS = 0.7458 * [turbidity as NTU] + 3.
⁴ Daily field measurements for station SP-E-IN were collected from cell 1 of the East Sedimentation Pond.
⁵ There was no discharge at the authorized discharge location (SP-E-OUT) during the monitoring period (April 27 – May 3), therefore daily field measurements for SP-E-OUT were not collected on those days. Daily field parameters were not collected at WWTP-E-OUT on May 2 as there was no effluent discharging at the time on 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.
⁷ Field DO measured at WWTP-E-OUT on April 30 (1.71 mg/L) is suspected to be erroneous and is therefore not presented in the table.

Table B-4: East Catchment Daily Discharge Volumes for the Monitoring Period (April 27 – May 3).

	East Sedimentation Pond Effluent	East TSS Settling System (E500GPM) Clarified Effluent (Station E500GPM-OUT)	East WWTP Treated Effluent (Station WWTP-E-OUT)	Discharge to Howe Sound (Station SP-E-OUT)
Unit	m ³	m ³	m ³	m ³
PE-111578 Discharge Limit	- ¹	- ¹	1100	- ¹
Date				
2025-04-27	0	0	588 ³	0
2025-04-28	0	0	743 ³	0
2025-04-29	0	0	539 ³	0
2025-04-30	0	0	492 ³	0
2025-05-01	0	0	814 ³	0
2025-05-02	0	883 ²	600 ³	0
2025-05-03	0	1,937 ²	781 ³	0

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.
Results in orange text exceeded the PE-111578 East Sedimentation Pond Discharge Limit.
¹ The annual average authorized discharge rate from the East Sedimentation Pond is 650 m³/day. As noted in PE-111578 Condition 2.1.4, the actual discharge rate may deviate from the annual average rate due to annual variations in precipitation amounts within the catchment area. Therefore, the annual average authorized discharge rate is not evaluated as a discharge limit.
² E500GPM clarified effluent is discharged to Howe Sound or recirculated to the East Sedimentation Pond based on operational considerations. Therefore, the E500GPM clarified effluent volume is generally higher than the volume discharged to Howe Sound. The E500GPM was operational on May 2 and 3 during the monitoring period (April 27 – May 3).
³ East WWTP treated effluent was recirculated to the East Sedimentation Pond.

Appendix C: West Catchment Monitoring Results

Table C-1: West Catchment Contact Water Influent Analytical Results Received at the Time of Reporting.

Parameter	Unit	Lowest Applicable Guideline ¹		PE-111578 Discharge Limit	Station SP-W-IN
					Influent SP-W-IN
					VA25B0096-002
		Long Term	Short Term		2025-05-02 14:45
General Parameters					
pH - Field	pH units	- ²	-	5.5 - 9.0	8.1
Conductivity - Field	µS/cm	-	-	-	165
Temperature - Field	°C	-	-	-	18.4
Salinity - Field	ppt	-	-	-	0.09
Turbidity - Field	NTU	-	-	-	15.42
TSS	mg/L	-	-	25 or 75 ⁶	11.7
Dissolved Oxygen - Field	mg/L	≥8	-	-	10.99
Anions and Nutrients					
Sulphate	mg/L	-	-	-	21.9
Chloride	mg/L	-	-	-	6.03
Fluoride	mg/L	-	1.5	-	0.076
Ammonia (N-NH ₃)	mg/L	1.4 ³	9.4 ³	-	<0.0050
Nitrite (N-NO ₂)	mg/L	-	-	-	0.0316
Nitrate (N-NO ₃)	mg/L	3.7	339	-	0.426
Total Metals					
Aluminum, total (T-Al)	mg/L	-	-	-	0.651
Antimony, total (T-Sb)	mg/L	-	0.27 ⁴	-	0.00084
Arsenic, total (T-As)	mg/L	0.0125	0.0125	-	0.00097
Barium, total (T-Ba)	mg/L	-	-	-	0.00634
Beryllium, total (T-Be)	mg/L	0.1	-	-	<0.000020
Boron, total (T-B)	mg/L	1.2	-	-	<0.010
Cadmium, total (T-Cd)	mg/L	0.00012	-	-	<0.0000200
Chromium, total (T-Cr)	mg/L	-	-	-	0.0005
Cobalt, total (T-Co)	mg/L	-	-	-	0.00018
Copper, total (T-Cu)	mg/L	- ²	- ²	0.0043	0.00196
Iron, total (T-Fe)	mg/L	-	-	-	0.486
Lead, total (T-Pb)	mg/L	- ²	- ²	0.0035	0.00107
Manganese, total (T-Mn)	mg/L	-	-	-	0.0233
Mercury, total (T-Hg)	mg/L	0.000016 ⁵	-	-	0.00000297
Molybdenum, total (T-Mo)	mg/L	-	-	-	0.0181
Nickel, total (T-Ni)	mg/L	0.0083	-	-	<0.00050
Selenium, total (T-Se)	mg/L	0.002	-	-	0.000184
Silver, total (T-Ag)	mg/L	0.0005	0.0037	-	<0.000010
Thallium, total (T-Tl)	mg/L	-	-	-	0.000021
Uranium, total (T-U)	mg/L	-	-	-	0.00492
Vanadium, total (T-V)	mg/L	- ²	-	0.0081	0.00162
Zinc, total (T-Zn)	mg/L	- ²	- ²	0.0133	0.004
Hexavalent Chromium, total	mg/L	0.0015	-	-	<0.00050
Dissolved Metals					
Cadmium, dissolved (D-Cd)	mg/L	-	-	-	<0.0000100
Copper, dissolved (D-Cu)	mg/L	-	-	-	0.00083
Iron, dissolved (D-Fe)	mg/L	-	-	-	0.016
Lead, dissolved (D-Pb)	mg/L	-	-	-	0.000074
Manganese, dissolved (D-Mn)	mg/L	-	-	-	0.00152
Nickel, dissolved (D-Ni)	mg/L	-	-	-	<0.00050
Strontium, dissolved (D-Sr)	mg/L	-	-	-	0.0634
Vanadium, dissolved (D-V)	mg/L	-	-	-	0.0008
Zinc, dissolved (D-Zn)	mg/L	-	-	-	<0.0010
Polycyclic Aromatic Hydrocarbons (PAHs)					
Acenaphthene	mg/L	0.006	-	-	<0.000010
Acridine	mg/L	-	-	-	<0.000010
Anthracene	mg/L	-	-	-	<0.000010
Benz(a)anthracene	mg/L	-	-	-	<0.000010
Benzo(a)pyrene	mg/L	0.00001	-	-	<0.0000050
Chrysene	mg/L	0.0001	-	-	<0.000010
Fluoranthene	mg/L	-	-	-	<0.000010
Fluorene	mg/L	0.012	-	-	<0.000010
1-methylnaphthalene	mg/L	0.001	-	-	<0.000010
2-methylnaphthalene	mg/L	0.001	-	-	<0.000010
Naphthalene	mg/L	0.001	-	-	<0.000050
Phenanthrene	mg/L	-	-	-	<0.000020
Pyrene	mg/L	-	-	-	<0.000010
Quinoline	mg/L	-	-	-	<0.000050
Volatile Organic Compounds (VOCs)					
Benzene	mg/L	0.11	-	-	<0.00050
Ethylbenzene	mg/L	0.25	-	-	<0.00050
Methyl-tert-butyl-ether	mg/L	5	0.44	-	<0.00050
Styrene	mg/L	-	-	-	<0.00050
Toluene	mg/L	0.215	-	-	<0.00040
Total Xylenes	mg/L	-	-	-	<0.00050
Chlorobenzene	mg/L	0.025	-	-	<0.00050
1,2-Dichlorobenzene	mg/L	0.042	-	-	<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. Results in orange text exceeded the PE-111578 West Sedimentation Pond Discharge Limit. The West Catchment did not discharge during the monitoring period (April 27 – May 3). 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 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.

Table C-2: West Catchment Contact Water Effluent Analytical Results Received at the Time of Reporting.

Parameter	Unit	Lowest Applicable Guideline ¹		PE-111578 Discharge Limit	Station W500GPM-OUT
					Effluent
		Long Term	Short Term		W500GPM-OUT VA25A9550-004
					2025-04-28 13:00
General Parameters					
pH - Field	pH units	- ²	-	5.5 - 9.0	8.1
Conductivity - Field	µS/cm	-	-	-	126
Temperature - Field	°C	-	-	-	15.6
Salinity - Field	ppt	-	-	-	0.07
Turbidity - Field	NTU	-	-	-	2.77
TSS	mg/L	-	-	25 or 75 ⁶	<3.0
Dissolved Oxygen - Field	mg/L	≥8	-	-	11.81
Anions and Nutrients					
Sulphate	mg/L	-	-	-	21.4
Chloride	mg/L	-	-	-	5.67
Fluoride	mg/L	-	1.5	-	0.071
Ammonia (N-NH ₃)	mg/L	1.4 ³	9.4 ³	-	0.0088
Nitrite (N-NO ₂)	mg/L	-	-	-	0.0497
Nitrate (N-NO ₃)	mg/L	3.7	339	-	0.479
Total Metals					
Aluminum, total (T-Al)	mg/L	-	-	-	0.217
Antimony, total (T-Sb)	mg/L	-	0.27 ⁴	-	0.00082
Arsenic, total (T-As)	mg/L	0.0125	0.0125	-	0.00104
Barium, total (T-Ba)	mg/L	-	-	-	0.00218
Beryllium, total (T-Be)	mg/L	0.1	-	-	<0.000020
Boron, total (T-B)	mg/L	1.2	-	-	<0.010
Cadmium, total (T-Cd)	mg/L	0.00012	-	-	<0.0000150
Chromium, total (T-Cr)	mg/L	-	-	-	<0.00050
Cobalt, total (T-Co)	mg/L	-	-	-	<0.00010
Copper, total (T-Cu)	mg/L	- ²	- ²	0.0043	0.00137
Iron, total (T-Fe)	mg/L	-	-	-	0.098
Lead, total (T-Pb)	mg/L	- ²	- ²	0.0035	0.000383
Manganese, total (T-Mn)	mg/L	-	-	-	0.0107
Mercury, total (T-Hg)	mg/L	0.000016 ⁵	-	-	0.0000012
Molybdenum, total (T-Mo)	mg/L	-	-	-	0.0215
Nickel, total (T-Ni)	mg/L	0.0083	-	-	<0.00050
Selenium, total (T-Se)	mg/L	0.002	-	-	0.000131
Silver, total (T-Ag)	mg/L	0.0005	0.0037	-	<0.000010
Thallium, total (T-Tl)	mg/L	-	-	-	0.000022
Uranium, total (T-U)	mg/L	-	-	-	0.00528
Vanadium, total (T-V)	mg/L	- ²	-	0.0081	0.00122
Zinc, total (T-Zn)	mg/L	- ²	- ²	0.0133	<0.0030
Hexavalent Chromium, total	mg/L	0.0015	-	-	<0.00050
Dissolved Metals					
Cadmium, dissolved (D-Cd)	mg/L	-	-	-	<0.0000100
Copper, dissolved (D-Cu)	mg/L	-	-	-	0.00087
Iron, dissolved (D-Fe)	mg/L	-	-	-	0.026
Lead, dissolved (D-Pb)	mg/L	-	-	-	0.000129
Manganese, dissolved (D-Mn)	mg/L	-	-	-	0.00794
Nickel, dissolved (D-Ni)	mg/L	-	-	-	<0.00050
Strontium, dissolved (D-Sr)	mg/L	-	-	-	0.0597
Vanadium, dissolved (D-V)	mg/L	-	-	-	0.00105
Zinc, dissolved (D-Zn)	mg/L	-	-	-	<0.0010
Polycyclic Aromatic Hydrocarbons (PAHs)					
Acenaphthene	mg/L	0.006	-	-	<0.000010
Acridine	mg/L	-	-	-	<0.000010
Anthracene	mg/L	-	-	-	<0.000010
Benz(a)anthracene	mg/L	-	-	-	<0.000010
Benzo(a)pyrene	mg/L	0.00001	-	-	<0.0000050
Chrysene	mg/L	0.0001	-	-	<0.000010
Fluoranthene	mg/L	-	-	-	<0.000010
Fluorene	mg/L	0.012	-	-	<0.000010
1-methylnaphthalene	mg/L	0.001	-	-	<0.000010
2-methylnaphthalene	mg/L	0.001	-	-	<0.000010
Naphthalene	mg/L	0.001	-	-	<0.000050
Phenanthrene	mg/L	-	-	-	<0.000020
Pyrene	mg/L	-	-	-	<0.000010
Quinoline	mg/L	-	-	-	<0.000050
Volatile Organic Compounds (VOCs)					
Benzene	mg/L	0.11	-	-	<0.00050
Ethylbenzene	mg/L	0.25	-	-	<0.00050
Methyl-tert-butyl-ether	mg/L	5	0.44	-	<0.00050
Styrene	mg/L	-	-	-	<0.00050
Toluene	mg/L	0.215	-	-	<0.00050
Total Xylenes	mg/L	-	-	-	<0.00050
Chlorobenzene	mg/L	0.025	-	-	- ⁷
1,2-Dichlorobenzene	mg/L	0.042	-	-	- ⁷

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. Results in orange text exceeded the PE-111578 West Sedimentation Pond Discharge Limit. The West Catchment did not discharge during the monitoring period (April 27 – May 3).
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 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.
⁷ Chlorobenzene and 1,2-dichlorobenzene were not tested in the W500GPM-OUT sample collected April 28.

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	0.0051 ^{3,4}
Station	Water Type	Sample ID	Lab ID	Sampling Date		
Influent						
SP-W-IN	Influent	SP-W-IN	VA25B0096-002	2025-05-02	0.000058	0.00297

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.

Table C-4: West Catchment Field Measurements Collected During the Monitoring Period (April 27 – May 3).

Parameter			Temperature	Dissolved Oxygen (DO)	Salinity	Turbidity	Estimated TSS ³	pH	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	2025-04-27 11:09	18.1	10.09	0.07	8.47	9.3	8.6	130	No
SP-W-IN	Influent	2025-04-28 13:38	16.5	10.53	0.07	6.60	7.9	8.4	129	No
SP-W-IN	Influent	2025-04-29 15:15	17.4	11.10	0.08	11.21	11.4	8.1	138	No
SP-W-IN	Influent	2025-04-30 13:14	18.3	11.19	0.08	9.97	10.4	8.6	142	No
SP-W-IN	Influent	2025-05-01 16:37	20.2	10.63	0.07	4.28	6.2	8.4	142	No
SP-W-IN	Influent	2025-05-02 14:40	20.7	10.62	0.09	13.73	13.2	8.2	167	No
SP-W-IN	Influent	2025-05-02 14:45	18.4	10.99	0.09	15.42	14.5	8.1	165	No
SP-W-IN	Influent	2025-05-03 12:54	19.6	9.97	0.09	3.19	5.4	8.0	166	No
W500GPM-IN	Influent	2025-04-28 13:33	16.1	9.63	0.07	40.86	33.5	7.6	126	No
W500GPM-IN	Influent	2025-05-01 16:26	19.5	9.99	0.07	8.15	9.1	8.5	139	No
W500GPM-IN	Influent	2025-05-02 10:46	18.3	10.05	0.09	10.44	10.8	8.1	164	No
W500GPM-IN	Influent	2025-05-03 12:42	19.1	9.62	0.09	5.46	7.1	8.1	161	No
ESC-W-IN	Influent	2025-04-27 11:05	17.6	9.57	0.07	2.80	5.1	8.4	127	No
Effluent ⁵										
W500GPM-OUT	Effluent	2025-04-28 13:00	15.6	11.81	0.07	2.77	5.1	8.1	126	No
W500GPM-OUT	Effluent	2025-05-01 16:44	19.9	11.61	0.07	2.49	4.9	8.2	141	No
W500GPM-OUT	Effluent	2025-05-02 10:54	18.7	11.28	0.09	2.03	4.5	8.1	166	No
W500GPM-OUT	Effluent	2025-05-03 12:50	19.0	9.45	0.09	1.56	4.2	7.9	160	No
ESC-W-OUT	Effluent	2025-04-27 11:01	17.2	9.13	0.08	1.80	4.3	8.0	137	No

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.
Results in orange text exceeded 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 There was no discharge at the authorized discharge location (SP-W-OUT) during the monitoring period (April 27 – May 3), therefore daily field measurements for SP-W-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.

Table C-5: West Catchment Daily Discharge Volumes for the Monitoring Period (April 27 – May 3).

	West Sedimentation Pond Effluent	West TSS Settling System (W500GPM) Clarified Effluent (Station W500GPM-OUT)	West TSS Settling System (ESC) Clarified Effluent (Station ESC-W-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	_ ²	_ ²	_ ²	120	_ ²
Date					
2025-04-27	0	495 ³	446 ⁴	0	0
2025-04-28	0	1,748 ³	0	0	0
2025-04-29	0	350 ³	0	0	0
2025-04-30	0	946 ³	0	0	0
2025-05-01	0	2,331 ³	0	0	0
2025-05-02	0	1,996 ³	0	0	0
2025-05-03	0	2,469 ³	0	0	0

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.
Results in orange text exceeded 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 The annual average authorized discharge rate from the West Sedimentation Pond is 310 m³/day. As noted in PE-111578 Condition 2.1.4, the actual discharge rate may deviate from the annual average rate due to annual variations in precipitation amounts within the catchment area. Therefore, the annual average authorized discharge rate is not evaluated as a discharge limit.
³ W500GPM clarified effluent is discharged to Howe Sound or recirculated to the West Sedimentation Pond based on operational considerations. Therefore, the W500GPM clarified effluent volume may be higher than the volume discharged to Howe Sound at station SP-W-OUT. The W500GPM was operational each day during the monitoring period (April 27 – May 3).
⁴ ESC clarified effluent was recirculated to the West Sedimentation Pond on April 27.

Appendix D: Non-Contact Water Diversion Ditch Outlets Results

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

Parameter	Unit	Lowest Applicable Guideline ^{1, 2}		Station OUT-02
				Non-Contact Water Diversion Ditch Outlet
				OUT-02
		VA25A8974-001		
		Long Term	Short Term	2025-04-22 11:45
General Parameters				
pH - Field	pH units	6.5 - 9.0	-	6.9
Specific Conductivity - Field	µS/cm	-	-	16
Temperature - Field	°C	-	-	10.6
Salinity - Field	ppt	-	-	0.01
Turbidity - Field	NTU	-	-	2.39
TSS	mg/L	-	-	3.3
Dissolved Oxygen - Field	mg/L	>=8	>=5	11.13
Anions and Nutrients				
Sulphate ²	mg/L	128	-	2.05
Chloride	mg/L	120	600	<0.50
Fluoride ²	mg/L	-	0.40	<0.020
Ammonia (N-NH ₃) ²	mg/L	1.84	21.8	<0.0050
Nitrite (N-NO ₂) ²	mg/L	0.02	0.06	<0.0010
Nitrate (N-NO ₃)	mg/L	3	32.8	0.0612
Total Metals				
Aluminum, total (T-Al) ²	mg/L	0.056	-	<u>0.159</u>
Antimony, total (T-Sb)	mg/L	0.074	-	<0.00010
Arsenic, total (T-As)	mg/L	0.005	-	0.00014
Barium, total (T-Ba)	mg/L	1	-	0.00358
Beryllium, total (T-Be)	mg/L	0.00013	-	<0.000020
Boron, total (T-B)	mg/L	1.2	29	<0.010
Cadmium, total (T-Cd) ²	mg/L	0.000036	0.00012	0.0000053
Chromium, total (T-Cr) ⁴	mg/L	0.001	-	0.00056
Cobalt, total (T-Co)	mg/L	0.001	0.11	<0.00010
Copper, total (T-Cu)	mg/L	-	-	0.00056
Iron, total (T-Fe)	mg/L	0.3	1	0.102
Lead, total (T-Pb)	mg/L	-	-	0.000141
Manganese, total (T-Mn) ²	mg/L	0.768	0.816	0.00356
Mercury, total (T-Hg) ³	mg/L	0.00002	-	0.00000167
Molybdenum, total (T-Mo)	mg/L	0.073	46	0.00126
Nickel, total (T-Ni) ²	mg/L	0.025	-	<0.00050
Selenium, total (T-Se)	mg/L	0.001	-	<0.000050
Silver, total (T-Ag)	mg/L	0.00012	-	<0.000010
Thallium, total (T-Tl)	mg/L	0.0008	-	<0.000010
Uranium, total (T-U)	mg/L	0.0085	0.033	0.000214
Vanadium, total (T-V)	mg/L	0.12	-	<0.00050
Zinc, total (T-Zn)	mg/L	-	-	0.0108
Hexavalent Chromium, total	mg/L	0.001	-	-
Dissolved Metals				
Cadmium, dissolved (D-Cd) ²	mg/L	0.000027	0.000038	<0.0000050
Copper, dissolved (D-Cu) ²	mg/L	0.00031	0.0019	<u>0.00044</u>
Iron, dissolved (D-Fe)	mg/L	-	0.35	<0.010
Lead, dissolved (D-Pb) ²	mg/L	0.0018	-	<0.000050
Manganese, dissolved (D-Mn) ²	mg/L	0.35	1.97	0.00155
Nickel, dissolved (D-Ni) ²	mg/L	0.00070	0.012	<0.00050
Strontium, dissolved (D-Sr)	mg/L	2.5	-	0.00832
Vanadium, dissolved (D-V)	mg/L	-	-	<0.00050
Zinc, dissolved (D-Zn) ²	mg/L	0.0052	0.0093	0.0042
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	0.00001	-	-
Chrysene	mg/L	-	-	-
Fluoranthene	mg/L	0.00004	-	-
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	0.00002	-	-
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:
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 When MeHg ≤ 0.5% of total Hg, BC WQG = 0.00002 mg/L.
⁴ 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.

Table D-2: Non-contact Water Diversion Ditch Outlet 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	0.0073-0.0084 ^{3,4}
Station	Water Type	Sample ID	Lab ID	Sampling Date		
OUT-02	Non-Contact Water	OUT-02	VA25A8563-001	2025-04-16	0.000021	0.00153
OUT-02	Non-Contact Water	OUT-02	VA25A8974-001	2025-04-22	<0.000020	0.00167

Notes:

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

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

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

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

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

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

Appendix E: Freshwater Receiving Environment Results

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

Parameter	Unit	Lowest Applicable Guideline ^{1, 2}		Station SW-01	Station SW-02	Station SW-07	Station SW-04
				Woodfibre Creek Lower Reach	Mill Creek Upper Reach	Upstream Mill Creek	East Creek Lower Reach
				SW-01	SW-02	SW-07	SW-04
		VA25A8975-002	VA25A8840-001	VA25A8840-003	VA25A8975-001		
		Long Term	Short Term	2025-04-22 11:45	2025-04-20 12:30	2025-04-20 14:30	2025-04-22 14:00
General Parameters							
pH - Field	pH units	6.5 - 9.0	-	7.2	7.2	6.8	7.7
Specific Conductivity - Field	µS/cm	-	-	58	7	6	67
Temperature - Field	°C	-	-	8.5	7.2	5.5	10.8
Salinity - Field	ppt	-	-	0.04	0	0	0.04
Turbidity - Field	NTU	-	-	0.8	0.12	0.25	1.57
TSS	mg/L	-	-	3.3	<3.0	<3.0	3.9
Dissolved Oxygen - Field	mg/L	>=8	>=5	11.75	12.64	12.51	11.14
Anions and Nutrients							
Sulphate ²	mg/L	128-218	-	0.41	1.45	1.58	5.28
Chloride	mg/L	120	600	<0.50	<0.50	<0.50	4.35
Fluoride ²	mg/L	-	0.40-0.97	<0.020	<0.020	<0.020	0.117
Ammonia (N-NH ₃) ²	mg/L	1.04-15.3	9.65-24.2	<0.0050	<0.0050	<0.0050	0.0073
Nitrite (N-NO ₂) ²	mg/L	0.020-0.060	0.060-0.18	<0.0010	<0.0010	<0.0010	<0.0010
Nitrate (N-NO ₃)	mg/L	3	32.8	0.0230	0.0336	0.0318	0.0085
Total Metals							
Aluminum, total (T-Al) ²	mg/L	0.037-0.11	-	<u>0.158</u>	<u>0.0782</u>	<u>0.0752</u>	<u>0.162</u>
Antimony, total (T-Sb)	mg/L	0.074	-	<0.00010	<0.00010	<0.00010	<0.00010
Arsenic, total (T-As)	mg/L	0.005	-	0.00011	<0.00010	<0.00010	0.00112
Barium, total (T-Ba)	mg/L	1	-	0.00162	0.00177	0.00198	0.00748
Beryllium, total (T-Be)	mg/L	0.00013	-	<0.000020	<0.000020	<0.000020	<0.000020
Boron, total (T-B)	mg/L	1.2	29	<0.010	<0.010	<0.010	<0.010
Cadmium, total (T-Cd) ²	mg/L	0.000036-0.000074	0.00011-0.00083	<0.0000050	0.0000062	<0.0000050	<0.0000100
Chromium, total (T-Cr) ⁴	mg/L	0.001	-	<0.00050	<0.00050	<0.00050	0.00099
Cobalt, total (T-Co)	mg/L	0.001	0.11	<0.00010	<0.00010	<0.00010	<0.00010
Copper, total (T-Cu)	mg/L	-	-	<0.00050	<0.00050	<0.00050	0.00061
Iron, total (T-Fe)	mg/L	0.3	1	0.030	0.012	0.014	0.052
Lead, total (T-Pb)	mg/L	-	-	0.000058	<0.000050	<0.000050	<0.000050
Manganese, total (T-Mn) ²	mg/L	0.768-0.782	0.816-0.983	0.00091	0.00047	0.00044	0.00973
Mercury, total (T-Hg) ³	mg/L	0.00002	-	0.00000166	0.0000006	0.00000076	0.00000067
Molybdenum, total (T-Mo)	mg/L	0.073	46	0.000196	0.000352	0.000464	0.00941
Nickel, total (T-Ni) ²	mg/L	0.025	-	<0.00050	<0.00050	<0.00050	<0.00050
Selenium, total (T-Se)	mg/L	0.001	-	<0.000050	<0.000050	<0.000050	<0.000050
Silver, total (T-Ag)	mg/L	0.00012	-	<0.000010	<0.000010	<0.000010	<0.000010
Thallium, total (T-Tl)	mg/L	0.0008	-	<0.000010	<0.000010	<0.000010	<0.000010
Uranium, total (T-U)	mg/L	0.0085	0.033	0.000647	0.000172	0.000146	0.00192
Vanadium, total (T-V)	mg/L	0.12	-	<0.00050	0.00055	<0.00050	0.0008
Zinc, total (T-Zn)	mg/L	-	-	<0.0030	<0.0030	<0.0030	<0.0030
Hexavalent Chromium, total	mg/L	0.001	-	<0.00050	<0.00050	<0.00050	0.00082
Dissolved Metals							
Cadmium, dissolved (D-Cd) ²	mg/L	0.000018-0.00011	0.000038-0.00023	<0.0000050	<0.0000050	0.0000058	0.0000113
Copper, dissolved (D-Cu) ²	mg/L	0.00020-0.00045	0.0011-0.0027	<0.00020	<0.00020	<0.00020	<u>0.00035</u>
Iron, dissolved (D-Fe)	mg/L	-	0.35	0.021	<0.010	<0.010	<0.010
Lead, dissolved (D-Pb) ²	mg/L	0.0026-0.0037	-	<0.000050	<0.000050	<0.000050	<0.000050
Manganese, dissolved (D-Mn) ²	mg/L	0.32-0.38	1.97-2.99	0.00121	0.0003	0.00057	0.0068
Nickel, dissolved (D-Ni) ²	mg/L	0.00060-0.00090	0.0094-0.012	<0.00050	<0.00050	<0.00050	<0.00050
Strontium, dissolved (D-Sr)	mg/L	2.5	-	0.00298	0.00452	0.0044	0.0374
Vanadium, dissolved (D-V)	mg/L	-	-	<0.00050	<0.00050	<0.00050	0.00075
Zinc, dissolved (D-Zn) ²	mg/L	0.0033-0.0047	0.0083-0.019	<0.0010	<0.0010	<0.0010	0.0012
Polycyclic Aromatic Hydrocarbons (PAHs)							
Acenaphthene	mg/L	0.0058	-	<0.000010	<0.000010	<0.000010	<0.000010
Acridine	mg/L	0.003	-	<0.000010	<0.000010	<0.000010	<0.000010
Anthracene	mg/L	0.000012	-	<0.000010	<0.000010	<0.000010	<0.000010
Benz(a)anthracene	mg/L	0.000018	-	<0.000010	<0.000010	<0.000010	<0.000010
Benzo(a)pyrene	mg/L	0.00001	-	<0.0000050	<0.0000050	<0.0000050	<0.0000050
Chrysene	mg/L	-	-	<0.000010	<0.000010	<0.000010	<0.000010
Fluoranthene	mg/L	0.00004	-	<0.000010	<0.000010	<0.000010	<0.000010
Fluorene	mg/L	0.003	-	<0.000010	<0.000010	<0.000010	<0.000010
1-methylnaphthalene	mg/L	-	-	<0.000010	<0.000010	<0.000010	<0.000010
2-methylnaphthalene	mg/L	-	-	<0.000010	<0.000010	<0.000010	0.000011
Naphthalene	mg/L	0.001	0.001	<0.000050	<0.000050	<0.000050	<0.000050
Phenanthrene	mg/L	0.0003	-	<0.000020	<0.000020	<0.000020	<0.000020
Pyrene	mg/L	0.00002	-	<0.000010	<0.000010	<0.000010	<0.000010
Quinoline	mg/L	0.0034	-	<0.000050	<0.000050	<0.000050	<0.000050
Volatile Organic Compounds (VOCs)							
Benzene	mg/L	0.04	-	<0.00050	<0.00050	<0.00050	<0.00050
Ethylbenzene	mg/L	0.09	-	<0.00050	<0.00050	<0.00050	<0.00050
Methyl-tert-butyl-ether	mg/L	10	3.4	<0.00050	<0.00050	<0.00050	<0.00050
Styrene	mg/L	0.072	-	<0.00050	<0.00050	<0.00050	<0.00050
Toluene	mg/L	0.0005	-	<0.00040	<0.00040	<0.00040	<0.00040
Total Xylenes	mg/L	0.03	-	<0.00050	<0.00050	<0.00050	<0.00050
Chlorobenzene	mg/L	-	-	<0.00050	<0.00050	<0.00050	<0.00050
1,2-Dichlorobenzene	mg/L	-	-	<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 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 When MeHg ≤ 0.5% of total Hg, BC WQG = 0.00002 mg/L.

⁴ 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.

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

Parameter					Total Methylmercury	Total Mercury
Unit					µg/L	µg/L
Lowest Applicable Guideline ¹					0.0001 ²	0.0034-0.0083 ^{3,4}
Station	Water Type	Sample ID	Lab ID	Sampling Date		
SW-01	Woodfibre Creek, lower reach	SW-01	VA25A8975-002	2025-04-22	<0.000020	0.00166
SW-04	East Creek, lower reach	SW-04	VA25A8975-001	2025-04-22	<0.000020	0.00067

Notes:

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

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

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

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

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

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

Appendix F: Estuarine Water Receiving Environment Results

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

Parameter	Unit	Lowest Applicable Guideline ¹		Station SW-03
				Mill Creek Estuary
				SW-03
		Long Term	Short Term	VA25A8840-002 2025-04-20 12:05
General Parameters				
pH - Field	pH units	7.0 - 8.7	-	<u>6.7</u>
Specific Conductivity - Field	µS/cm	-	-	499
Temperature - Field	°C	-	-	9.0
Salinity - Field	ppt	-	-	0.4
Turbidity - Field	NTU	-	-	0.23
TSS	mg/L	-	-	<3.0
Dissolved Oxygen - Field	mg/L	-	-	12.60
Anions and Nutrients				
Sulphate	mg/L	-	-	35.6
Chloride	mg/L	-	-	259
Fluoride	mg/L	-	-	<0.100
Ammonia (N-NH ₃)	mg/L	-	-	<0.0050
Nitrite (N-NO ₂)	mg/L	-	-	<0.0050
Nitrate (N-NO ₃)	mg/L	-	-	0.0381
Total Metals				
Aluminum, total (T-Al)	mg/L	-	-	0.0908
Antimony, total (T-Sb)	mg/L	-	-	<0.00010
Arsenic, total (T-As)	mg/L	-	-	0.00016
Barium, total (T-Ba)	mg/L	-	-	0.00222
Beryllium, total (T-Be)	mg/L	-	-	<0.000020
Boron, total (T-B)	mg/L	-	-	0.063
Cadmium, total (T-Cd)	mg/L	-	-	<0.0000050
Chromium, total (T-Cr)	mg/L	-	-	<0.00050
Cobalt, total (T-Co)	mg/L	-	-	<0.00010
Copper, total (T-Cu)	mg/L	0.002	0.003	<0.00050
Iron, total (T-Fe)	mg/L	-	-	0.030
Lead, total (T-Pb)	mg/L	0.002	0.14	<0.000050
Manganese, total (T-Mn)	mg/L	-	-	0.00122
Mercury, total (T-Hg) ²	mg/L	0.00002	-	0.00000073
Molybdenum, total (T-Mo)	mg/L	-	-	0.000568
Nickel, total (T-Ni)	mg/L	-	-	<0.00050
Selenium, total (T-Se)	mg/L	-	-	<0.000050
Silver, total (T-Ag)	mg/L	-	-	<0.000010
Thallium, total (T-Tl)	mg/L	-	-	<0.000010
Uranium, total (T-U)	mg/L	-	-	0.00021
Vanadium, total (T-V)	mg/L	-	-	0.0008
Zinc, total (T-Zn)	mg/L	-	-	<0.0030
Hexavalent Chromium, total	mg/L	-	-	<0.00050
Dissolved Metals				
Cadmium, dissolved (D-Cd)	mg/L	-	-	<0.0000050
Copper, dissolved (D-Cu)	mg/L	-	-	0.00021
Iron, dissolved (D-Fe)	mg/L	-	-	<0.010
Lead, dissolved (D-Pb)	mg/L	-	-	<0.000050
Manganese, dissolved (D-Mn)	mg/L	-	-	0.00092
Nickel, dissolved (D-Ni)	mg/L	-	-	<0.00050
Strontium, dissolved (D-Sr)	mg/L	-	-	0.106
Vanadium, dissolved (D-V)	mg/L	-	-	<0.00050
Zinc, dissolved (D-Zn)	mg/L	-	-	<0.0010
Polycyclic Aromatic Hydrocarbons (PAHs)				
Acenaphthene	mg/L	-	-	<0.000010
Acridine	mg/L	-	-	<0.000010
Anthracene	mg/L	-	-	<0.000010
Benz(a)anthracene	mg/L	-	-	<0.000010
Benzo(a)pyrene	mg/L	-	-	<0.0000050
Chrysene	mg/L	-	-	<0.000010
Fluoranthene	mg/L	-	-	<0.000010
Fluorene	mg/L	-	-	<0.000010
1-methylnaphthalene	mg/L	-	-	<0.000010
2-methylnaphthalene	mg/L	-	-	<0.000010
Naphthalene	mg/L	-	-	<0.000050
Phenanthrene	mg/L	-	-	<0.000020
Pyrene	mg/L	-	-	<0.000010
Quinoline	mg/L	-	-	<0.000050
Volatile Organic Compounds (VOCs)				
Benzene	mg/L	-	-	<0.00050
Ethylbenzene	mg/L	-	-	<0.00050
Methyl-tert-butyl-ether	mg/L	-	-	<0.00050
Styrene	mg/L	-	-	<0.00050
Toluene	mg/L	-	-	<0.00040
Total Xylenes	mg/L	-	-	<0.00050
Chlorobenzene	mg/L	-	-	<0.00050
1,2-Dichlorobenzene	mg/L	-	-	<0.00050

Notes:
Results in **underlined in bold italics** exceed the applicable long-term water quality guideline for the protection of estuarine water aquatic life.
Shaded results exceed the applicable short-term water quality guideline for the protection of estuarine water aquatic life.
¹ The lowest applicable guidelines from approved or working BC WQGs, Canadian (CCME) WQGs and Federal WQGs.
² When MeHg ≤ 0.5% of total Hg, BC WQG = 0.00002 mg/L.

Appendix G: Marine Water Receiving Environment Results

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

Parameter	Unit	Lowest Applicable Guideline ¹		Station IDZ-E1			Station IDZ-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
		Long Term	Short Term	VA25A9123-001	VA25A9123-002	VA25A9123-004	VA25A9123-005	VA25A9123-006	VA25A9123-007
				2025-04-23 11:30	2025-04-23 11:50	2025-04-23 12:10	2025-04-23 10:45	2025-04-23 11:15	2025-04-23 11:45
General Parameters									
pH - Field	pH units	7.0 - 8.7	-	7.80	8.37	8.02	7.93	8.40	7.68
Specific Conductivity - Field	µS/cm	-	-	5183	27286	31735	5175	27973	32405
Temperature - Field	°C	-	-	9.3	10.6	9.0	9.0	10.8	8.6
Salinity - Field	ppt	Narrative ²	-	4.09	23.77	29.42	4.12	24.36	30.45
Turbidity - Field	NTU	Narrative ²	Narrative ²	1.28	0.24	0.68	1.23	0.34	0.94
TSS	mg/L	Narrative ²	Narrative ²	2.4	3.3	2.2	2.6	3.8	<2.0
Dissolved Oxygen - Field	mg/L	>=8	-	11.86	13.15	13.10	12.14	14.37	<u>7.30</u>
Anions and Nutrients									
Sulphate	mg/L	-	-	308	750	2090	471	1840	2340
Chloride	mg/L	-	-	2210	5340	15100	3390	13000	16700
Fluoride	mg/L	-	1.5	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Ammonia (N-NH ₃)	mg/L	0.81-8.1 ³	5.4-48 ³	0.0065	0.0070	<0.0050	0.0066	<0.0050	0.0302
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 Metals									
Aluminum, total (T-Al)	mg/L	-	-	0.067	0.0466	0.0081	0.0592	0.0094	0.0082
Antimony, total (T-Sb)	mg/L	-	0.27 ⁴	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010
Arsenic, total (T-As)	mg/L	0.0125	0.0125	<0.00040	0.0006	0.00124	0.00043	0.0011	0.00157
Barium, total (T-Ba)	mg/L	-	-	0.0073	0.0075	0.0087	0.0077	0.0086	0.0092
Beryllium, total (T-Be)	mg/L	0.1	-	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050
Boron, total (T-B)	mg/L	1.2	-	0.55	1.17	<u>3.22</u>	0.76	<u>2.88</u>	<u>3.59</u>
Cadmium, total (T-Cd)	mg/L	0.00012	-	<0.000020	0.000029	0.000071	0.00002	0.000046	0.000093
Chromium, total (T-Cr)	mg/L	-	-	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050
Cobalt, total (T-Co)	mg/L	-	-	0.000068	0.000072	0.000072	0.000069	0.000064	0.000071
Copper, total (T-Cu)	mg/L	0.002	0.003	0.00071	0.00068	<0.00050	0.00075	<0.00050	<0.00050
Iron, total (T-Fe)	mg/L	-	-	0.117	0.082	0.014	0.114	0.016	0.018
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	-	-	0.00685	0.00536	0.00169	0.00669	0.0023	0.00154
Mercury, total (T-Hg)	mg/L	0.000016 ⁵	-	<0.0000050	<0.0000050	<0.0000050	<0.0000050	<0.0000050	<0.0000050
Molybdenum, total (T-Mo)	mg/L	-	-	0.00222	0.00386	0.00819	0.00202	0.00738	0.00893
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	-	-	0.000476	0.00093	0.00224	0.000554	0.0019	0.00231
Vanadium, total (T-V)	mg/L	0.005	-	0.00051	0.00051	0.0006	0.00054	<0.00050	0.00167
Zinc, total (T-Zn)	mg/L	0.01	0.055	<0.0030	<0.0030	<0.0030	<0.0030	<0.0030	<0.0030
Hexavalent Chromium, total	mg/L	0.0015	-	<0.00150	<0.00150	<0.00150	<0.00150	<0.00150	<0.00150
Dissolved Metals									
Cadmium, dissolved (D-Cd)	mg/L	-	-	<0.000020	0.000027	0.000053	<0.000020	0.00005	0.000077
Copper, dissolved (D-Cu)	mg/L	-	-	0.00056	0.00052	<0.00050	0.00056	<0.00050	<0.00050
Iron, dissolved (D-Fe)	mg/L	-	-	0.042	0.026	<0.010	0.041	<0.010	<0.010
Lead, dissolved (D-Pb)	mg/L	-	-	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010
Manganese, dissolved (D-Mn)	mg/L	-	-	0.00613	0.00444	0.00142	0.00611	0.00223	0.00122
Nickel, dissolved (D-Ni)	mg/L	-	-	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050
Strontium, dissolved (D-Sr)	mg/L	-	-	0.805	2.22	5.81	0.788	4.76	6.17
Vanadium, dissolved (D-V)	mg/L	-	-	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	0.00149
Zinc, dissolved (D-Zn)	mg/L	-	-	0.0017	0.0011	<0.0010	0.0017	<0.0010	0.0014
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 Narrative guideline for the evaluation of 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 not discharging, 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.
⁵ When MeHg ≤ 0.5% of total Hg, BC WQG = 0.00002 mg/L. The Canadian WQG = 0.000016 mg/L.

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

Parameter	Unit	Lowest Applicable Guideline ¹		Reference Station WQR1		
				0.5 m Below Surface	2 m Below Surface	2 m Above Seafloor
				WQR1-0.5	WQR1-2m	WQR1-SF
		VA25A9123-008	VA25A9123-009	VA25A9123-010		
Long Term	Short Term	2025-04-23 9:45	2025-04-23 10:00	2025-04-23 10:20		
General Parameters						
pH - Field	pH units	7.0 - 8.7	-	7.79	8.33	7.66
Specific Conductivity - Field	µS/cm	-	-	5399	25958	32490
Temperature - Field	°C	-	-	9.4	11.1	8.6
Salinity - Field	ppt	Narrative ²	-	4.26	22.2	30.54
Turbidity - Field	NTU	Narrative ²	Narrative ²	1.36	0.38	0.4
TSS	mg/L	Narrative ²	Narrative ²	<2.0	<2.0	5.9
Dissolved Oxygen - Field	mg/L	>=8	-	11.92	12.24	<u>7.28</u>
Anions and Nutrients						
Sulphate	mg/L	-	-	287	1230	2310
Chloride	mg/L	-	-	2020	8820	16500
Fluoride	mg/L	-	1.5	<1.0	<1.0	<1.0
Ammonia (N-NH ₃)	mg/L	1.3-8.1 ³	8.5-54 ³	0.0086	0.0081	0.0286
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 Metals						
Aluminum, total (T-Al)	mg/L	-	-	0.0655	0.0539	0.0096
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	<0.00040	0.00058	0.00178
Barium, total (T-Ba)	mg/L	-	-	0.0081	0.008	0.0091
Beryllium, total (T-Be)	mg/L	0.1	-	<0.00050	<0.00050	<0.00050
Boron, total (T-B)	mg/L	1.2	-	0.54	<u>1.22</u>	<u>3.56</u>
Cadmium, total (T-Cd)	mg/L	0.00012	-	<0.000020	0.000031	0.000086
Chromium, total (T-Cr)	mg/L	-	-	<0.00050	<0.00050	<0.00050
Cobalt, total (T-Co)	mg/L	-	-	0.000084	0.000082	0.00007
Copper, total (T-Cu)	mg/L	0.002	0.003	0.00082	0.00081	<0.00050
Iron, total (T-Fe)	mg/L	-	-	0.147	0.095	0.018
Lead, total (T-Pb)	mg/L	0.002	0.14	<0.00010	<0.00010	<0.00010
Manganese, total (T-Mn)	mg/L	-	-	0.00842	0.00664	0.00137
Mercury, total (T-Hg)	mg/L	0.000016 ⁵	-	<0.0000050	<0.0000050	<0.0000050
Molybdenum, total (T-Mo)	mg/L	-	-	0.00144	0.00311	0.00905
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	-	-	0.000339	0.000865	0.00242
Vanadium, total (T-V)	mg/L	0.005	-	0.0006	0.00061	0.00158
Zinc, total (T-Zn)	mg/L	0.01	0.055	<0.0030	<0.0030	<0.0030
Hexavalent Chromium, total	mg/L	0.0015	-	<0.00150	<0.00150	<0.00150
Dissolved Metals						
Cadmium, dissolved (D-Cd)	mg/L	-	-	<0.000020	0.000037	0.000079
Copper, dissolved (D-Cu)	mg/L	-	-	0.00054	0.00058	<0.00050
Iron, dissolved (D-Fe)	mg/L	-	-	0.06	<0.010	<0.010
Lead, dissolved (D-Pb)	mg/L	-	-	<0.00010	<0.00010	<0.00010
Manganese, dissolved (D-Mn)	mg/L	-	-	0.00824	0.00466	0.00146
Nickel, dissolved (D-Ni)	mg/L	-	-	<0.00050	<0.00050	<0.00050
Strontium, dissolved (D-Sr)	mg/L	-	-	0.723	3.59	6.09
Vanadium, dissolved (D-V)	mg/L	-	-	<0.00050	0.00054	0.00146
Zinc, dissolved (D-Zn)	mg/L	-	-	<0.0010	<0.0010	<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 Narrative guideline for the evaluation of 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 from marine reference stations, 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.
⁵ When MeHg ≤ 0.5% of total Hg, BC WQG = 0.00002 mg/L. The Canadian WQG = 0.000016 mg/L.