TECHNICAL MEMORANDUM

To:	**Ian McAllister, Ashleigh Crompton, Mike Champion, Jackie Boruch and Ryan Schucroft (Woodfibre LNG)**	**Date:**	**4 April 2025**
From:	**Holly Pelletier, Cheng Kuang and Patrick Mueller (Lorax)**	**Project #:**	**A633-9**
Subject:	**PE-111578 Weekly Discharge and Compliance Report #57 for March 23 – 29**		

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 #57) was prepared by Lorax Environmental and summarizes WDA monitoring conducted for the period of March 23 – 29. 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 #57 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 F for contact water, treated water and receiving environment samples.

1. Current Conditions

1.1 Water Management Infrastructure

The Construction Phase of the Woodfibre LNG Export Facility commenced in October 2023. Early-stage civil works are ongoing, and these include site grading, levelling, overburden and bedrock excavation, pouring of concrete foundations and construction of contact water management facilities. 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 March 23 – 29, 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) or the East and West Sedimentation Ponds for treatment or settling of suspended particulate.

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.

Non-contact water diversion ditches west of Mill Creek have been fully or partially 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, 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 m^3/day installed capacity. A second TSS settling system (W500GPM) was added and commissioned for use on November 28 and provides an additional 2,725 m^3/day installed capacity for clarifying water. A TSS settling system (E500GPM) for the East Sedimentation Pond was commissioned on December 4, 2024, also with 2,725 m^3/day installed capacity.

Contaminated contact water from within the East and West Catchments, and non-contaminated contact water stored in the East Sedimentation Pond are directed to the East WWTP for treatment prior to discharge to Howe Sound. Direct discharge of East WWTP treated contact water to Howe Sound was implemented from October 28, 2024, until January 23, 2025, after which WWTP effluent was redirected to the East Sedimentation Pond and only clarified pond water was discharged to Howe Sound.

The east and west catchment permanent outfall structures have been completed; however, the East and West Sedimentation Pond effluent conveyance pipelines from the ponds to the outfalls are not yet constructed. Temporary pumps and hoses are used to convey clarified or treated effluent to the authorized outfall structures for discharge to Howe Sound. In the east catchment, treated WWTP effluent is directed to the East Sedimentation Pond. Since December 2, 2024 sedimentation pond effluent clarified through the E500GPM is directed to the discharge tank and from there 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 was observed during the monitoring period (March 23 – 29), with precipitation recorded on each day and the heaviest rainfall (51.6 mm) on March 23. The total precipitation amount during the monitoring period was 140 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
2025-03-23	51.6	4.9	2.9	Heavy rain
2025-03-24	9.2	9.2	4.5	Overcast
2025-03-25	13.4	11.5	6.3	Overcast
2025-03-26	13.0	14.4	6.3	Rain
2025-03-27	25.4	11.8	7.3	Rain
2025-03-28	22.4	9.4	6.3	Rain
2025-03-29	5.2	9.9	5.0	Overcast, Showers

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

From March 23 – 29, the East Sedimentation Pond received non-contaminated contact water from sumps and tanks in the 1100 and 1200 Areas and the 1300 Collection Ditch (Appendix A, Figure 2). Non-contaminated contact waters from Area 4100 Sump, Area 4200 Sump, and the Surge Pond were directed to the West Sedimentation Pond (Appendix A, Figure 3).

Routine operation of the East WWTP continued during the monitoring period. 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. A portion of the pond water clarified through the E500GPM system was recirculated to the East Sedimentation Pond each day of the monitoring period, except on March 24 and 25. A total of 7,679 m^3 of East Sedimentation Pond effluent clarified through the TSS settling system (E500GPM) was directed to the authorized discharge location SP-E-OUT during the monitoring period (March 23 – 29). Daily water volumes processed by the East WWTP and the East TSS settling system (E500GPM), and volumes discharged to Howe Sound from the East Catchment authorized discharge location (SP-E-OUT) are provided in Appendix B (Table B-6).

West Sedimentation Pond water was clarified through the W500GPM TSS settling systems prior to discharge. The ESC system was not operational during the monitoring period. A portion of the pond water clarified through the W500GPM settling system was recirculated to the West Sedimentation Pond on March 23 and 28. A total of 13,969 m^3 of effluent was clarified through the W500GPM system and directed to the SP-W-OUT discharge location during the monitoring period. Daily clarified effluent volumes from the TSS settling systems, and volumes discharged to Howe Sound from the West Catchment authorized discharge location (SP-W-OUT) are provided in Appendix C (Table C-4).

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 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, SP-E-NE, SP-E-NW, E500GPM-IN, E500GPM-OUT, WWTP-E-IN, WWTP-E-OUT, SP-W-IN, SP-W-W, SP-W-E, 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 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 IDZ-E1, IDZ-E2, IDZ-W1, IDZ-W2, WQR1, WQR2, WWTP-E-IN, WWTP-E-OUT, SP-E-IN, SP-E-NE, SP-E-OUT, E500GPM-IN, E500GPM-OUT, SP-W-IN, SP-W-E, SP-W-OUT, W500GPM-IN, and W500GPM-OUT during the monitoring period (March 23 – 29). Sampling dates and parameters tested are summarized in Table 2.

Overall, the PE-111578 monitoring requirements that were applicable during the monitoring period (March 23 – 29) were met.

Field parameters were not collected at East Catchment effluent station SP-E-OUT on March 25, 28, and 29, and at the West Catchment effluent station SP-W-OUT on March 29 since there was no discharge at the time of monitoring. 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 March 23 – 29.

Sampling Date	Sample	Description	Parameters Tested	Monitoring Frequency
March 23, 2025	SP-E-IN	East Sedimentation Pond influent entering the pond and collected at cell 1	Field Parameters.	D
	SP-E-OUT	East Sedimentation Pond clarified effluent discharge to Howe Sound, collected at sampling port	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		
	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
	SP-W-OUT	West Sedimentation Pond clarified effluent discharge to Howe Sound, collected at sampling port	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		
March 24, 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
	SP-E-NE	East Sedimentation Pond, in-pond sample	Field Parameters.	P
	SP-E-OUT	East Sedimentation Pond clarified effluent discharge to Howe Sound, collected at sampling port	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, 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, Physical & General Parameters, VH & BTEX, EPHs & PAHs, Total, Dissolved and Speciated Metals, VOCs, Methylmercury, Dioxins & Furans.	D, W_1, W_2
	SP-W-E	West Sedimentation Pond, in-pond sample	Field Parameters.	P
	SP-W-OUT	West Sedimentation Pond clarified effluent discharge to Howe Sound, collected at sampling port	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		
March 25, 2025	SP-E-IN	East Sedimentation Pond influent entering the pond and collected at cell 1	Field Parameters.	D
	SP-E-NE	East Sedimentation Pond, in-pond sample	Field Parameters.	P
	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
	SP-W-E	West Sedimentation Pond, in-pond sample	Field Parameters.	P
	SP-W-OUT	West Sedimentation Pond clarified effluent discharge to Howe Sound, collected at sampling port	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		
	IDZ-E1-0.5	Howe Sound IDZ station E1; 0.5 m below surface	Chronic Toxicity, Field, Physical, General Parameters, EPHs & PAHs, Metals	W_3, Q
	IDZ-E2-0.5	Howe Sound IDZ station E2; 0.5 m below surface		
	IDZ-W1-0.5	Howe Sound IDZ station W1; 0.5 m below surface		
	IDZ-W2-0.5	Howe Sound IDZ station W2; 0.5 m below surface		
	WQR1-0.5	Reference site 1; 0.5 m below surface		
	WQR2-0.5	Reference site 2; 0.5 m below surface		
	IDZ-E1-2m	Howe Sound IDZ station E1; 2 m below surface	Field and Physical Parameters.	W_3
	IDZ-E1-SF	Howe Sound IDZ station E1; 2 m above the seafloor		
	IDZ-E2-2m	Howe Sound IDZ station E2; 2 m below surface		
	IDZ-E2-SF	Howe Sound IDZ station E2; 2 m above the seafloor		
	IDZ-W1-2m	Howe Sound IDZ station W1; 2 m below surface		
	IDZ-W1-SF	Howe Sound IDZ station W1; 2 m above the seafloor		
	IDZ-W2-2m	Howe Sound IDZ station W2; 2 m below surface		
	IDZ-W2-SF	Howe Sound IDZ station W2; 2 m above the seafloor		
	WQR1-2m	Reference site 1; 2 m below surface		
	WQR1-SF	Reference site 1; 2 m above the seafloor		
	WQR2-2m	Reference site 2; 2 m below surface		
	WQR2-SF	Reference site 2; 2 m above the seafloor		

Table 2 (continued): Summary of PE-111578 Monitoring Samples Collected March 23 – 29.

Sampling Date	Sample	Description	Parameters Tested	Monitoring Frequency
March 26, 2025	SP-E-IN	East Sedimentation Pond influent entering the pond and collected at cell 1	Field Parameters.	D
	SP-E-OUT	East Sedimentation Pond clarified effluent discharge to Howe Sound, collected at sampling port	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		
	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
	SP-W-OUT	West Sedimentation Pond clarified effluent discharge to Howe Sound, collected at sampling port		
	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		
March 27, 2025	SP-E-IN	East Sedimentation Pond influent entering the pond and collected at cell 1	Field Parameters.	D
	SP-E-OUT	East Sedimentation Pond clarified effluent discharge to Howe Sound, collected at sampling port	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		
	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
	SP-W-OUT	West Sedimentation Pond clarified effluent discharge to Howe Sound, collected at sampling port		
	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		
March 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		
	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
	SP-W-OUT	West Sedimentation Pond clarified effluent discharge to Howe Sound, collected at sampling port	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		
March 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		
	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

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.
W_1 – initial high frequency monitoring for physical parameters at WWTP and sedimentation pond influent and effluent stations.
W_2 – initial high frequency monitoring for all parameters at WWTP and sedimentation pond influent and effluent stations.
W_3 – initial high frequency monitoring for physical parameters at IDZ stations.
Q – quarterly monitoring to support chronic toxicity testing. Includes sampling for chronic toxicity, field, physical and general parameters, EPHs & PAHs, and metals.
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 available at the time of reporting for samples collected during the monitoring period (March 23 – 29) and for other samples that have not been previously reported are listed below in Table 3. Testing for methylmercury, dioxins and furans typically requires up to four weeks to complete. Analytical results not available at the time of reporting will be included in future weekly reports when testing is completed. Reporting of results is pending for the following samples and parameters:

- SP-W-IN and SP-W-OUT collected March 5 (dioxins and furans)
- SP-E-IN, SP-E-OUT, WWTP-E-IN, WWTP-E-OUT, SP-W-IN, and SP-W-OUT collected March 11 (methylmercury, dioxins and furans)
- IDZ-W1, IDZ-W2, and WQR2 collected March 12 (dioxins and furans)
- IDZ-E1, IDZ-E2, and WQR1 collected March 13 (dioxins and furans)
- SP-E-IN, SP-E-OUT, WWTP-E-IN, and WWTP-E-OUT collected March 17 (dioxins and furans)
- SP-W-IN and SP-W-OUT collected March 18 (dioxins and furans)
- SW-02, SW-03, and SW-07 collected March 18 (dioxins and furans)
- SW-01 and SW-04 collected March 19 (methylmercury, dioxins and furans)
- 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 at 0.5 m below surface collected March 25 (chronic toxicity)

Table 3: Summary of Analytical Results Included in Weekly Discharge and Compliance Report #57.

Sample	Description	Sampling Date	Parameters Reported
SP-W-IN	West Sedimentation Pond influent entering the pond and collected at cell 1	February 18, 2025	Dioxins and furans
SP-W-OUT	West Sedimentation Pond clarified effluent discharge to Howe Sound, collected at sampling port		
IDZ-W1-0.5	Howe Sound IDZ station W1; 0.5 m below surface		
IDZ-W1-2m	Howe Sound IDZ station W1; 2 m below surface		
IDZ-W1-SF	Howe Sound IDZ station W1; 2 m above the seafloor		
IDZ-W2-0.5	Howe Sound IDZ station W2; 0.5 m below surface		
IDZ-W2-2m	Howe Sound IDZ station W2; 2 m below surface		
IDZ-W2-SF	Howe Sound IDZ station W2; 2 m above the seafloor		
WQR2-0.5	Reference site 2; 0.5 m below surface		
WQR2-2m	Reference site 2; 2 m below surface		
WQR2-SF	Reference site 2; 2 m above the seafloor		
SW-02	Upper Reach of Mill Creek (upstream of the third bridge)	February 19, 2025	Dioxins and furans
SW-03	Mill Creek Estuary		
SW-07	Upstream Mill Creek (at the diversion inlet)		
WWTP-E-IN	East WWTP at the influent meter box	February 20, 2025	Dioxins and furans
WWTP-E-OUT	East WWTP at the effluent meter box		
SP-E-IN	East Sedimentation Pond influent entering the pond and collected at cell 1		
SP-E-OUT	East Sedimentation Pond clarified effluent discharge to Howe Sound, collected at sampling port		
SW-01	Lower Reach of Woodfibre Creek (near the mouth)	February 21, 2025	Dioxins and furans
SW-04	Lower Reach of East Creek (near the outlet to the outfall culvert)		
WWTP-E-IN	East WWTP at the influent meter box	February 24, 2025	Dioxins and furans
WWTP-E-OUT	East WWTP at the effluent meter box		
SP-E-IN	East Sedimentation Pond influent entering the pond and collected at cell 1		
SP-E-OUT	East Sedimentation Pond clarified effluent discharge to Howe Sound, collected at sampling port		
SP-W-IN	West Sedimentation Pond influent entering the pond and collected at cell 1		
SP-W-OUT	West Sedimentation Pond clarified effluent discharge to Howe Sound, collected at sampling port		
SP-E-IN	East Sedimentation Pond influent entering the pond and collected at cell 1	March 7, 2025	Dioxins and furans
SP-E-OUT	East Sedimentation Pond clarified effluent discharge to Howe Sound, collected at sampling port		
WWTP-E-IN	East WWTP at the influent meter box	March 8, 2025	Dioxins and furans
WWTP-E-OUT	East WWTP at the effluent meter box		
IDZ-W1-0.5	Howe Sound IDZ station W1; 0.5 m below surface	March 12, 2025	Dioxins and furans
IDZ-W1-2m	Howe Sound IDZ station W1; 2 m below surface		
IDZ-W1-SF	Howe Sound IDZ station W1; 2 m above the seafloor		
IDZ-W2-0.5	Howe Sound IDZ station W2; 0.5 m below surface		
IDZ-W2-2m	Howe Sound IDZ station W2; 2 m below surface		
IDZ-W2-SF	Howe Sound IDZ station W2; 2 m above the seafloor		
WQR2-0.5	Reference site 2; 0.5 m below surface		
WQR2-2m	Reference site 2; 2 m below surface		
WQR2-SF	Reference site 2; 2 m above the seafloor		
SW-02	Upper Reach of Mill Creek (upstream of the third bridge)	March 18, 2025	Field, Physical and General Parameters, Total and Dissolved Metals, Hexavalent Chromium, PAHs, VOCs, Methylmercury
SW-03	Mill Creek Estuary		
SW-07	Upstream Mill Creek (at the diversion inlet)		
SW-01	Lower Reach of Woodfibre Creek (near the mouth)	March 19, 2025	Field, Physical and General Parameters, Total and Dissolved Metals, Hexavalent Chromium, PAHs, VOCs
SW-04	Lower Reach of East Creek (near the outlet to the outfall culvert)		
WWTP-E-IN	East WWTP at the influent meter box	March 24, 2025	Field, Physical and General Parameters, Total and Dissolved Metals, Hexavalent Chromium, PAHs, VOCs, Methylmercury
WWTP-E-OUT	East WWTP at the effluent meter box		
SP-E-IN	East Sedimentation Pond influent entering the pond and collected at cell 1		
SP-E-OUT	East Sedimentation Pond clarified effluent discharge to Howe Sound, collected at sampling port		
SP-W-IN	West Sedimentation Pond influent entering the pond and collected at cell 1		
SP-W-OUT	West Sedimentation Pond clarified effluent discharge to Howe Sound, collected at sampling port		
IDZ-E1-0.5	Howe Sound IDZ station E1; 0.5 m below surface	March 25, 2025	Field, Physical and General Parameters, Total and Dissolved Metals, Hexavalent Chromium, PAHs, VOCs.
IDZ-E2-0.5	Howe Sound IDZ station E2; 0.5 m below surface		
IDZ-W1-0.5	Howe Sound IDZ station W1; 0.5 m below surface		
IDZ-W2-0.5	Howe Sound IDZ station W2; 0.5 m below surface		
WQR1-0.5	Reference site 1; 0.5 m below surface		
WQR2-0.5	Reference site 2; 0.5 m below surface		
IDZ-E1-2m	Howe Sound IDZ station E1; 2 m below surface	March 25, 2025	Field and Physical Parameters
IDZ-E1-SF	Howe Sound IDZ station E1; 2 m above the seafloor		
IDZ-E2-2m	Howe Sound IDZ station E2; 2 m below surface		
IDZ-E2-SF	Howe Sound IDZ station E2; 2 m above the seafloor		
IDZ-W1-2m	Howe Sound IDZ station W1; 2 m below surface		
IDZ-W1-SF	Howe Sound IDZ station W1; 2 m above the seafloor		
IDZ-W2-2m	Howe Sound IDZ station W2; 2 m below surface		
IDZ-W2-SF	Howe Sound IDZ station W2; 2 m above the seafloor		

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 (March 23 – 29), clarified water from the East Sedimentation Pond TSS settling system (E500GPM) discharged to Howe Sound at the authorized discharge location (station SP-E-OUT) each day. Daily clarified effluent volumes, East WWTP treated effluent volumes, and discharge volumes from the East Catchment are summarized in Appendix B, Table B-6.

Field measurements were collected March 23 – 29 at multiple influent and effluent locations, as outlined in Section 2, and are tabulated in Appendix B, Table B-5. Analytical samples collected on March 24 (stations SP-E-IN, WWTP-E-IN, WWTP-E-OUT, and SP-E-OUT) were available at the time of reporting. Screening results for East Catchment contact water quality are tabulated in Table B-1 and Table B-2 of Appendix B. During the monitoring period (March 23 – 29), field measurements and analytical results collected at SP-E-OUT met PE-111578 discharge limits and WQGs.

Methylmercury analytical results were available at the time of reporting for East WWTP influent and effluent (WWTP-E-IN and WWTP-E-OUT, respectively) collected March 24. Methylmercury results were also available for East Sedimentation Pond influent (SP-E-IN) and effluent discharged at SP-E-OUT on March 24. The methylmercury concentration in the effluent discharged at SP-E-OUT on March 24 was 0.000036 µg/L (Appendix B, Table B-3). Methylmercury results and the corresponding total mercury results met the respective WQGs (see Section 3.1) in the SP-E-OUT sample.

Dioxin and furan results were reported for East WWTP influent (station WWTP-E-IN) collected on February 20, February 24, and March 8 and for East Sedimentation Pond influent (station SP-E-IN) collected on February 20, February 24, and March 7 (as discussed in Reports #52, #53, and #54). Dioxins and furans results were also reported for East WWTP effluent

(station WWTP-E-OUT) collected on February 20, February 24, and March 8 and for effluent discharged at SP-E-OUT on February 20, February 24, and March 7 (as discussed in Reports #52, #53, and #54). The lower and upper bound PCDD/F TEQ concentrations in effluent discharged at SP-E-OUT ranged from 0.000453 to 0.0184 pg/L and from 0.522 to 0.685 pg/L, respectively. Results are tabulated in Appendix B, Table B-4.

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. 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 (March 23 – 29), the TSS settling system (W500GPM) treated water stored in the West Sedimentation Pond each day and produced clarified effluent that was discharged to Howe Sound on each day at the authorized discharge location, SP-W-OUT. The smaller TSS settling system (ESC) was not operational during the monitoring period. Daily clarified effluent and discharge volumes from the West Catchment are summarized in Appendix C, Table C-4.

Field measurements were collected March 23 – 29 at multiple influent and effluent locations, as outlined in Section 2, and are tabulated in Appendix C, Table C-5. Analytical samples collected on March 24 (SP-W-IN and SP-W-OUT) 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.

During the monitoring period (March 23 – 29), field measurements and analytical results for the effluent sample collected at station SP-W-OUT on March 24 met PE-111578 discharge limits and WQGs.

Methylmercury analytical results were available at the time of reporting for West Sedimentation Pond influent (station SP-W-IN) and effluent (station SP-W-OUT) collected March 18 (as discussed in Report #56) and March 24. The methylmercury concentration in the effluent discharged at SP-W-OUT on March 18 and 24 was 0.0000249 and 0.000028 µg/L, respectively

(Appendix B, Table C-3). Methylmercury results and the corresponding total mercury results met the respective WQGs (see Section 3.1) in the SP-W-OUT sample.

Dioxin and furan results were reported for West Sedimentation Pond influent (station SP-W-IN) and effluent discharged at SP-W-OUT on February 18 (as discussed in Report #52) and February 24 (as discussed in Report #53). The lower and upper bound PCDD/F TEQ concentrations in effluent discharged at SP-W-OUT ranged from 0 to 0.000534 pg/L and from 0.967 to 1.29 pg/L, respectively. Results are tabulated in Appendix C, Table C-4.

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.

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 not available at the time of reporting for non-contact water diversion ditch outlet samples.

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 D (freshwater) and Appendix E (estuarine).

Analytical results were available at the time of reporting for freshwater and estuarine water samples collected near the mouth of Mill Creek (SW-02), upstream on Mill Creek (station SW-07), and the Mill Creek Estuary (station SW-03) on March 18, as well as samples collected near the mouths of Woodfibre Creek and East Creek (stations SW-01 and SW-04, respectively) on March 19 (as discussed in Report #56).

Parameter concentrations met WQGs except field pH, total aluminum, dissolved copper in one or more samples. Field pH was below the lower limit of the WQG in the Mill Creek estuary sample (station SW-03) (pH 6.7). Total aluminum was above the long-term WQG in samples collected at SW-01 (0.132 mg/L), SW-02 (0.0618 mg/L), and SW-07 (0.0848 mg/L). Dissolved copper was

above the long-term WQG at SW-01 (0.000274 mg/L) and SW-02 (0.000287 mg/L), and above both the long-term and short-term WQGs at SW-07 (0.000261 mg/L).

The observed concentrations of field pH, total aluminum, and dissolved copper were within concentration ranges observed in the pre-construction baseline monitoring program for freshwater and estuarine water receiving environment stations. The sample collected from upstream Mill Creek (station SW-07) on March 19 represents background concentrations in Mill Creek; therefore, the total aluminum and dissolved copper concentrations measured at SW-07 are not flagged as exceedances.

Methylmercury results were available at the time of reporting for freshwater and estuarine water samples collected March 18 (as discussed in Report #56). Methylmercury concentrations were <0.00002 µg/L in all samples and met the WQG. The corresponding total mercury results also met WQGs. Results are tabulated in Appendix D, Table D-2 (freshwater) and Appendix E, Table E-2 (estuarine).

Dioxin and furan results were available at the time of reporting for freshwater and estuarine water samples collected February 19 (SW-02, SW-03, and SW-07) and February 21 (SW-01 and SW-04) (as discussed in Report #52). The lower and upper bound PCDD/F TEQ concentrations in all samples ranged from 0.000831 to 0.0526 pg/L and from 0.431 to 1.73 pg/L, respectively. Results are tabulated in Appendix D, Table D-3 (freshwater) and Appendix E, Table E-3 (estuarine).

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 F.

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 at IDZ-E1, IDZ-E2, IDZ-W1, and IDZ-W2 on March 18 and March 25. Results were also available at the marine reference stations WQR1 and WQR2 at 0.5 m below surface on March 25. Parameter concentrations met WQGs except dissolved oxygen, and total boron in one or more samples (Appendix F; Tables F-1 through F-5).

In the marine samples collected 2 m above the seafloor at IDZ-W1 and IDZ-W2 on March 18 and 25, and at IDZ-E2 on March 25, dissolved oxygen was below the lower limit of the WQG (<8 mg/L) and ranged from 6.35 to 7.35 mg/L. Total boron concentration was above the WQG (1.2 mg/L) and ranged from 1.34 to 1.96 mg/L in all samples collected from the IDZ and marine reference stations on March 25. 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 the 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.

Dioxins and furans analytical results were available at the time of reporting for marine samples collected from 0.5 and 2 m below the water surface and 2 m above the seafloor at stations IDZ-W1, IDZ-W2, and marine reference station WQR2 on February 18 (as discussed in Report #52) and March 12 (as discussed in Report #55). For all samples, the lower and upper bound PCDD/F TEQ concentrations ranged from 0 to 0.0387 pg/L, and 0.452 to 1.54 pg/L, respectively. The lower and upper bound PCDD/F TEQ concentrations were within the concentration ranges observed in the baseline monitoring program or within background ranges observed at marine reference stations. Results are tabulated in Appendix F, Table F-6.

4. Quality Control

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

Table 4: Weekly Report QC Evaluations and Ongoing Items

QC Procedure	Observation	Investigation/Resolution
Reporting Period (March 23 – 29, Report #57)		
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 were under construction during the reporting period. The East and West Sedimentation Ponds and WWTPs have been constructed. The sedimentation pond conveyance ditches have not been constructed, and influent culverts have not been activated, and the associated influent monitoring stations have not been established. West Sedimentation Pond clarified water has been pumped through temporary hoses to the permanent outfall structure since December 2024 and pumping of East Sedimentation Pond to the permanent outfall structure commenced March 2025. Operation of the West WWTP has been suspended since September 25, 2024, and the plant has been repurposed to evaluate alternative treatment processes. 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). East Creek is monitored at SW-04 therefore monitoring at OUT-11 has been suspended. This item remains open.
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 complete at the time of Report #57 preparation. The pending results will be included in future weekly reports when available. This item remains open.
Ongoing Items from Previous Weekly Reports		
Report #52: Data QC	D-Cu and D-Zn greater than T-Cu and T-Zn	This item was first noted in Report #49 (January 31 samples) and has been updated with February 15 and February 18 results (Report #53). The dissolved copper and zinc concentrations were 2.2 to 2.5 times greater than the total copper concentration and 1.5 to 1.8 times the total zinc concentrations in two of four replicate samples collected at SP-E-OUT on January 31. The dissolved zinc concentrations were 3.6 and 5.5 times greater than the total zinc concentrations in the samples collected from WWTP-E-IN on February 15 and from SP-W-OUT on February 18, respectively. It is suspected that the dissolved metal sample bottles were contaminated during sample processing. Follow-up sampling and testing results meet discharge limits for copper and zinc, and although a root cause cannot be identified issue appears to have self-resolved. This item is closed.
Report #52: Pending Data	Analytical results not reported.	Dioxins and furans results for contact water and receiving environment samples collected February 18, 19, 20, and 21 are discussed in Sections 3.3, 3.4, 3.6, and 2.7 of Report #57. This item is closed.
Report #53: Pending Data	Analytical results not reported.	Dioxins and furans results for contact water samples collected February 24 are discussed in Sections 3.3 and 3.4 of Report #57. This item is closed.
Report #54: Pending Data	Analytical results not reported.	Dioxins and furans results for contact water samples collected March 7 and 8 are discussed in Section 3.4 of Report #57. Dioxins and furans results for contact water samples collected March 5 were not complete at the time of Report #57 preparation. The pending results will be included in future weekly reports when available. This item remains open.
Report #55: Potential Project Influence	Total aluminum and total iron at Mill Creek were above concentration ranges observed in the pre-construction baseline program.	Total aluminum and total iron concentrations observed at the Mill Creek station (SW-02) on February 19 were 2.7 and 1.2 times greater than the maximum concentrations observed in the pre-construction baseline monitoring program at Mill Creek, respectively. Moderate levels of turbidity (6.60 NTU) and TSS (4.7 mg/L) were observed in the Mill Creek sample collected February 19 and the total metal exceedances are attributed to particulate-bound forms of the metals. It was determined that road runoff outside the LNG Facility construction area flowed into the lower tributary of East Creek during heavy rains on that day. Water management has been modified to direct the road runoff to the construction contact water management system. This item is closed.
Report #55: Pending Data	Analytical results not reported.	Dioxins and furans results for receiving environment samples collected March 12 are discussed in Section 3.7 of Report #57. Methylmercury, dioxins and furans results for contact water samples collected March 11 and dioxins and furans results for receiving environment samples collected March 13 were not complete at the time of Report #57 preparation. The pending results will be included in future weekly reports when available. This item remains open.
Report #55: Data QC	TSS showed poor correlation with turbidity.	The TSS concentration (13.4 mg/L) shows poor correlation with field and lab turbidity (1.48 and 1.64 NTU, respectively) in the marine receiving environment sample collected 2 m below the water surface at IDZ-W2 on March 6. A reanalysis was completed with the laboratory and the original result did not confirm. The revised TSS concentration (8.0 mg/L) for the sample met the calculated WQG (10.7 mg/L). This item is closed.
Report #56: WWTP Performance Evaluation	Field pH, T-Cu, T-Hg, T-Zn, and hexavalent Cr above the MDO	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), and March 17 results (Report #56). The total copper concentrations were 0.00809, 0.00595, 0.00895, 0.00518, 0.00542, 0.00525, and 0.00450 mg/L in samples collected at WWTP-E-OUT on January 8, 14, 24, 28, February 24, March 8, and 17 respectively, and ranged from 0.00613 to 0.0108 mg/L in four replicate samples collected on February 15. The total mercury concentrations were 0.0000355, 0.000185, 0.000223, and 0.0000882 mg/L in samples collected on January 24, 30, February 20 and 24, respectively, and were 0.0000615 and 0.0000644 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. Review of possible causes is ongoing. The effluent discharged to Howe Sound at SP-E-OUT met the discharge limits on January 8. East WWTP effluent was routed to the pre-discharge holding tank and did not discharge to Howe Sound on January 14. East WWTP effluent has been directed to the East Sedimentation Pond since January 24. This item remains open.
Report #56: Pending Data	Analytical results not reported.	Analytical results for receiving environment samples collected March 18 and 19 are discussed in Sections 3.6 and 3.7 of Report #57. Methylmercury results for contact water samples collected March 18 are discussed in Section 3.4 of Report #57. Dioxins and furans results for contact water samples collected March 17 and 18 and receiving environment samples collected March 18 and 19 as well as methylmercury results for receiving environment samples collected March 19 were not complete at the time of Report #57 preparation. The pending results will be included in future weekly reports when available. This item remains open.

Notes:

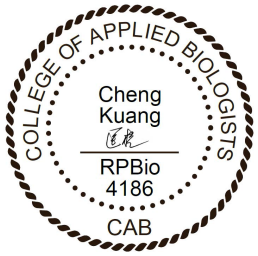
Result QA/QC screening includes the evaluation of field and lab QC results, comparison of total and dissolved metal results and review for modified detection limits.
Pending data are outstanding results from monitoring samples reported in the current or previous weekly reports.
Authorized works and monitoring program evaluation is an assessment of the completeness of the authorized works and monitoring program compared to PE-111578 specified or implied requirements.
WWTP performance evaluation is an assessment of WWTP effluent quality compared to operational MDOs.
Data QC indicates an evaluation of data trends or inter-parameter relationships that suggest a test result may not be representative of water quality at the time of monitoring.
Non-compliant discharge indicates exceedance of a discharge limit or a discharge that bypasses the sedimentation pond discharge location.
Potential project influence is an assessment that water quality at creek and Howe Sound baseline stations are above the baseline concentration range and may indicate project influence at these stations.

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.
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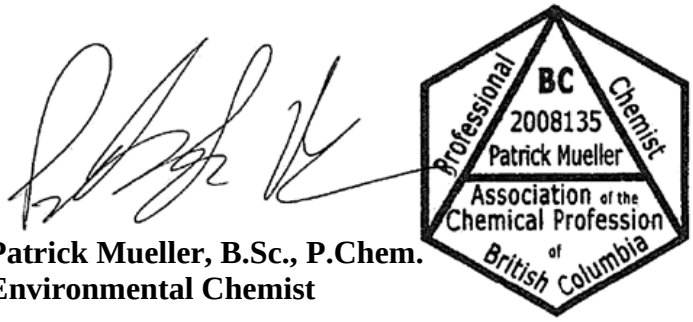

Patrick Mueller, B.Sc., P.Chem.
Environmental Chemist

Appendix A: Figures and Site Images

LEGEND

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

DATE SAVED:	Apr 04, 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: Woodfibre LNG

LORAX ENVIRONMENTAL

PROJECT:

Woodfibre LNG Project Construction Phase

TITLE: Completed or Under Construction Water Management Facilities and Established PE-111578 Monitoring Stations (March 29, 2025)

PROJECT #: A633-7 FIGURE: 1

P:\@Drafting\Woodfibre\Drafting Figures\APRX\WLNG Construction Phase 2024\WLNG Construction Phase 2024 - Weekly Reporting.aprx Figure 1 Monitoring and Compliance Locations

Figure 2: East Catchment contact water management facilities (March 23 – 29).

Figure 3: West Catchment contact water management facilities (March 23 – 29).

Figure 4: Aerial view of the East Sedimentation Pond (March 29, 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.

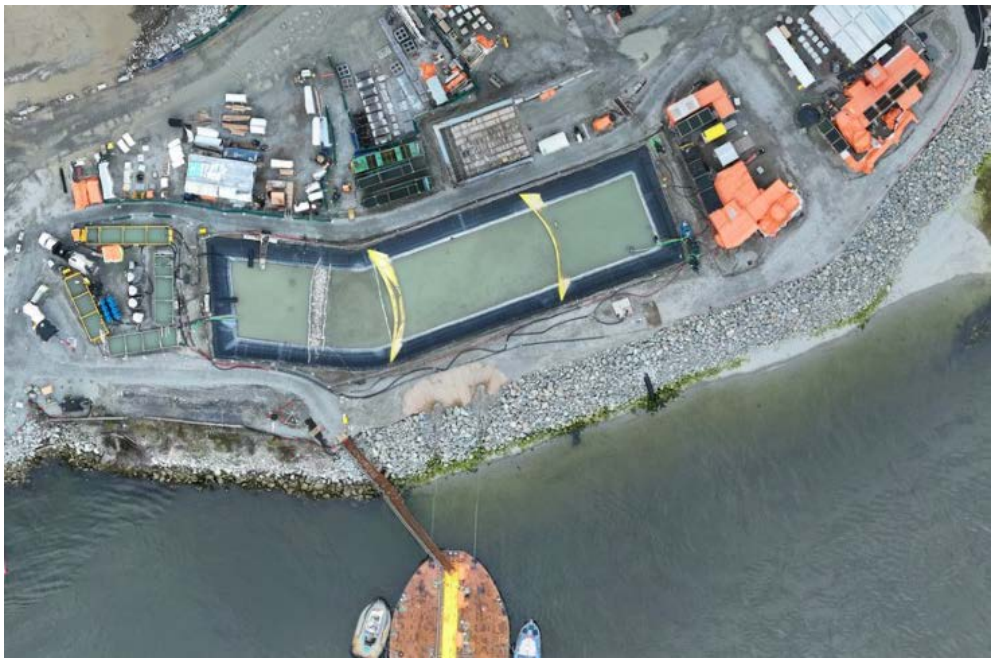

Figure 5: Aerial view of the West Sedimentation Pond (March 29, 2025). The TSS settling systems are located to the left (W500GPM) and right (ESC) of the pond.

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 WWTP-E-IN	Station SP-E-IN
					Influent	Influent
					WWTP-E-IN	SP-E-IN
					VA25A6436-004	VA25A6436-001
		Long Term	Short Term		2025-03-24 9:30	2025-03-24 9:50
General Parameters						
pH - Field	pH units	- [2]	-	5.5 - 9.0	6.1	5.6
Conductivity - Field	µS/cm	-	-	-	388	645
Temperature - Field	°C	-	-	-	8.0	7.3
Salinity - Field	ppt	-	-	-	0.28	0.48
Turbidity - Field	NTU	-	-	-	57.14	60.03
TSS	mg/L	-	-	75 [6]	43.6	62.2
Dissolved Oxygen - Field	mg/L	≥8	-	-	11.77	12.18
Anions and Nutrients						
Sulphate	mg/L	-	-	-	195	427
Chloride	mg/L	-	-	-	5.54	5.75
Fluoride	mg/L	-	1.5	-	0.138	<0.116
Ammonia ($N\text{-}NH_3$)	mg/L	29 [3]	191 [3]	-	0.0096	0.0128
Nitrite ($N\text{-}NO_2$)	mg/L	-	-	-	0.0098	0.0162
Nitrate ($N\text{-}NO_3$)	mg/L	3.7	339	-	0.694	0.688
Total Metals						
Aluminum, total (T-Al)	mg/L	-	-	-	4.37	5.09
Antimony, total (T-Sb)	mg/L	-	0.27 [4]	-	0.00111	0.00111
Arsenic, total (T-As)	mg/L	0.0125	0.0125	-	0.00338	0.00341
Barium, total (T-Ba)	mg/L	-	-	-	0.0443	0.0484
Beryllium, total (T-Be)	mg/L	0.1	-	-	0.00009	0.000124
Boron, total (T-B)	mg/L	1.2	-	-	0.047	0.041
Cadmium, total (T-Cd)	mg/L	0.00012	-	-	0.00015	***0.000191***
Chromium, total (T-Cr)	mg/L	-	-	-	0.00572	0.012
Cobalt, total (T-Co)	mg/L	-	-	-	0.0014	0.00204
Copper, total (T-Cu)	mg/L	- [2]	- [2]	0.0043	0.012	0.019
Iron, total (T-Fe)	mg/L	-	-	-	3.5	4.34
Lead, total (T-Pb)	mg/L	- [2]	- [2]	0.0035	0.00639	0.00796
Manganese, total (T-Mn)	mg/L	-	-	-	0.119	0.153
Mercury, total (T-Hg)	mg/L	0.000016 [5]	-	-	***0.0000484***	***0.000141***
Molybdenum, total (T-Mo)	mg/L	-	-	-	0.0543	0.0699
Nickel, total (T-Ni)	mg/L	0.0083	-	-	0.00192	0.00311
Selenium, total (T-Se)	mg/L	0.002	-	-	0.000282	0.000311
Silver, total (T-Ag)	mg/L	0.0005	0.0037	-	0.000026	0.000028
Thallium, total (T-Tl)	mg/L	-	-	-	0.000046	0.000057
Uranium, total (T-U)	mg/L	-	-	-	0.0117	0.0101
Vanadium, total (T-V)	mg/L	- [2]	-	0.0081	0.01	0.012
Zinc, total (T-Zn)	mg/L	- [2]	- [2]	0.0133	0.0384	0.0447
Hexavalent Chromium, total	mg/L	0.0015	-	-	0.00134	<0.00050
Dissolved Metals						
Cadmium, dissolved (D-Cd)	mg/L	-	-	-	0.0000703	0.000133
Copper, dissolved (D-Cu)	mg/L	-	-	-	0.00312	0.0102
Iron, dissolved (D-Fe)	mg/L	-	-	-	0.065	0.667
Lead, dissolved (D-Pb)	mg/L	-	-	-	<0.000050	0.00324
Manganese, dissolved (D-Mn)	mg/L	-	-	-	0.0385	0.0778
Nickel, dissolved (D-Ni)	mg/L	-	-	-	0.00059	0.00098
Strontium, dissolved (D-Sr)	mg/L	-	-	-	0.159	0.248
Vanadium, dissolved (D-V)	mg/L	-	-	-	0.00356	0.00479
Zinc, dissolved (D-Zn)	mg/L	-	-	-	0.0184	0.0278
Polycyclic Aromatic Hydrocarbons (PAHs)						
Acenaphthene	mg/L	0.006	-	-	0.000023	0.000012
Acridine	mg/L	-	-	-	<0.000010	<0.000010
Anthracene	mg/L	-	-	-	<0.000010	<0.000010
Benz(a)anthracene	mg/L	-	-	-	<0.000010	<0.000010
Benzo(a)pyrene	mg/L	0.00001	-	-	0.0000078	<0.0000050
Chrysene	mg/L	0.0001	-	-	0.000011	<0.000010
Fluoranthene	mg/L	-	-	-	0.000027	0.000017
Fluorene	mg/L	0.012	-	-	0.000012	<0.000010
1-methylnaphthalene	mg/L	0.001	-	-	0.000012	0.000010
2-methylnaphthalene	mg/L	0.001	-	-	0.000016	0.000012
Naphthalene	mg/L	0.001	-	-	<0.000050	<0.000050
Phenanthrene	mg/L	-	-	-	0.000025	<0.000020
Pyrene	mg/L	-	-	-	0.000027	0.000016
Quinoline	mg/L	-	-	-	0.000373	0.000931
Volatile Organic Compounds (VOCs)						
Benzene	mg/L	0.11	-	-	<0.00050	<0.00050
Ethylbenzene	mg/L	0.25	-	-	<0.00050	<0.00050
Methyl-tert-butyl-ether	mg/L	5	0.44	-	<0.00050	<0.00050
Styrene	mg/L	-	-	-	<0.00050	<0.00050
Toluene	mg/L	0.215	-	-	<0.00040	<0.00040
Total Xylenes	mg/L	-	-	-	<0.00050	<0.00050
Chlorobenzene	mg/L	0.025	-	-	<0.00050	<0.00050
1,2-Dichlorobenzene	mg/L	0.042	-	-	<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.
Results in orange text exceeded the PE-111578 East Sedimentation Pond Discharge Limit.
The East Catchment discharged each day during the monitoring period (March 23 – March 29).
[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. The discharge limit for Wet Conditions applied on March 23, 24, 27, 28, and 29.

Table B-2: East Catchment Effluent Analytical Results Received at the Time of Reporting.

Parameter	Unit	Lowest Applicable Guideline [1]		PE-111578 Discharge Limit	Station WWTP-E-OUT	Station SP-E-OUT
					Effluent	Effluent
					WWTP-E-Out	SP-E-Out
					VA25A6436-005	VA25A6436-002
		Long Term	Short Term		2025-03-24 10:50	2025-03-24 11:50
General Parameters						
pH - Field	pH units	- [2]	-	5.5 - 9.0	7.2	7.0
Conductivity - Field	µS/cm	-	-	-	846	379
Temperature - Field	°C	-	-	-	7.5	7.4
Salinity - Field	ppt	-	-	-	0.64	0.28
Turbidity - Field	NTU	-	-	-	1.03	2.49
TSS	mg/L	-	-	75 [6]	<3.0	<3.0
Dissolved Oxygen - Field	mg/L	≥8	-	-	12.19	14.44
Anions and Nutrients						
Sulphate	mg/L	-	-	-	507	182
Chloride	mg/L	-	-	-	6.01	6.44
Fluoride	mg/L	-	1.5	-	<0.142	0.12
Ammonia ($N\text{-}NH_3$)	mg/L	18-29 [3]	121-191 [3]	-	0.0052	<0.0050
Nitrite ($N\text{-}NO_2$)	mg/L	-	-	-	0.0098	0.0098
Nitrate ($N\text{-}NO_3$)	mg/L	3.7	339	-	0.646	0.622
Total Metals						
Aluminum, total (T-Al)	mg/L	-	-	-	0.164	0.208
Antimony, total (T-Sb)	mg/L	-	0.27 [4]	-	0.00105	0.00104
Arsenic, total (T-As)	mg/L	0.0125	0.0125	-	0.00221	0.00117
Barium, total (T-Ba)	mg/L	-	-	-	0.00458	0.00536
Beryllium, total (T-Be)	mg/L	0.1	-	-	<0.000020	<0.000020
Boron, total (T-B)	mg/L	1.2	-	-	0.033	0.051
Cadmium, total (T-Cd)	mg/L	0.00012	-	-	<0.0000250	<0.0000400
Chromium, total (T-Cr)	mg/L	-	-	-	0.00052	0.00169
Cobalt, total (T-Co)	mg/L	-	-	-	<0.00010	0.00018
Copper, total (T-Cu)	mg/L	- [2]	- [2]	0.0043	0.00225	0.00283
Iron, total (T-Fe)	mg/L	-	-	-	0.02	0.108
Lead, total (T-Pb)	mg/L	- [2]	- [2]	0.0035	0.000068	0.000266
Manganese, total (T-Mn)	mg/L	-	-	-	0.00793	0.0326
Mercury, total (T-Hg)	mg/L	0.000016 [5]	-	-	0.00000738	0.00000308
Molybdenum, total (T-Mo)	mg/L	-	-	-	0.0922	0.0500
Nickel, total (T-Ni)	mg/L	0.0083	-	-	<0.00050	0.00082
Selenium, total (T-Se)	mg/L	0.002	-	-	0.000346	0.00023
Silver, total (T-Ag)	mg/L	0.0005	0.0037	-	<0.000010	<0.000010
Thallium, total (T-Tl)	mg/L	-	-	-	0.000037	0.000013
Uranium, total (T-U)	mg/L	-	-	-	0.00662	0.00437
Vanadium, total (T-V)	mg/L	- [2]	-	0.0081	0.0059	0.00299
Zinc, total (T-Zn)	mg/L	- [2]	- [2]	0.0133	<0.0030	0.0049
Hexavalent Chromium, total	mg/L	0.0015	-	-	<0.00050	0.00094
Dissolved Metals						
Cadmium, dissolved (D-Cd)	mg/L	-	-	-	<0.0000250	<0.0000300
Copper, dissolved (D-Cu)	mg/L	-	-	-	0.00169	0.00171
Iron, dissolved (D-Fe)	mg/L	-	-	-	<0.010	<0.010
Lead, dissolved (D-Pb)	mg/L	-	-	-	<0.000050	<0.000050
Manganese, dissolved (D-Mn)	mg/L	-	-	-	0.00785	0.0297
Nickel, dissolved (D-Ni)	mg/L	-	-	-	<0.00050	<0.00050
Strontium, dissolved (D-Sr)	mg/L	-	-	-	0.184	0.142
Vanadium, dissolved (D-V)	mg/L	-	-	-	0.00587	0.0027
Zinc, dissolved (D-Zn)	mg/L	-	-	-	0.0011	0.0035
Polycyclic Aromatic Hydrocarbons (PAHs)						
Acenaphthene	mg/L	0.006	-	-	<0.000010	<0.000010
Acridine	mg/L	-	-	-	<0.000010	<0.000010
Anthracene	mg/L	-	-	-	<0.000010	<0.000010
Benz(a)anthracene	mg/L	-	-	-	<0.000010	<0.000010
Benzo(a)pyrene	mg/L	0.00001	-	-	<0.0000050	<0.0000050
Chrysene	mg/L	0.0001	-	-	<0.000010	<0.000010
Fluoranthene	mg/L	-	-	-	<0.000010	<0.000010
Fluorene	mg/L	0.012	-	-	<0.000010	<0.000010
1-methylnaphthalene	mg/L	0.001	-	-	<0.000010	<0.000010
2-methylnaphthalene	mg/L	0.001	-	-	<0.000010	<0.000010
Naphthalene	mg/L	0.001	-	-	<0.000050	<0.000050
Phenanthrene	mg/L	-	-	-	<0.000020	<0.000020
Pyrene	mg/L	-	-	-	<0.000010	<0.000010
Quinoline	mg/L	-	-	-	<0.000050	0.000060
Volatile Organic Compounds (VOCs)						
Benzene	mg/L	0.11	-	-	<0.00050	<0.00050
Ethylbenzene	mg/L	0.25	-	-	<0.00050	<0.00050
Methyl-tert-butyl-ether	mg/L	5	0.44	-	<0.00050	<0.00050
Styrene	mg/L	-	-	-	<0.00050	<0.00050
Toluene	mg/L	0.215	-	-	<0.00040	<0.00040
Total Xylenes	mg/L	-	-	-	<0.00050	<0.00050
Chlorobenzene	mg/L	0.025	-	-	<0.00050	<0.00050
1,2-Dichlorobenzene	mg/L	0.042	-	-	<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.
Results in orange text exceeded the PE-111578 East Sedimentation Pond Discharge Limit.
The East Catchment discharged each day during the monitoring period (March 23 – March 29).
[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. The discharge limit for Wet Conditions applied on March 23, 24, 27, 28, and 29.

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

Parameter					**Total Methylmercury**	**Total Mercury**
Unit					**µg/L**	**µg/L**
Lowest Applicable Guideline[1]					0.0001 [2]	0.0086 – 0.020 [3,4]
Station	**Water Type**	**Sample ID**	**Lab ID**	**Sampling Date**		
Influent						
SP-E-IN	Influent	SP-E-IN	VA25A6436-001	2025-03-24	***0.000340***	***0.141***
WWTP-E-IN	Influent	WWTP-E-IN	VA25A6436-004	2025-03-24	***0.000148***	***0.0484***
Effluent						
SP-E-OUT	Effluent	SP-E-OUT	VA25A6436-002	2025-03-24	0.000036	0.00308
WWTP-E-OUT	Effluent	WWTP-E-OUT	VA25A6436-005	2025-03-24	0.000027	0.00738

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-4: East Catchment Dioxin and Furan Toxicity Equivalency Quantity (TEQ) Results Received at the Time of Reporting.

Parameter					**Lower Bound PCDD/F TEQ**	**Upper Bound PCDD/F TEQ**
Unit					**pg/L**	**pg/L**
Station	**Water Type**	**Sample ID**	**Lab ID**	**Sampling Date**		
Influent						
SP-E-IN	Influent	SP-E-IN	L2759044-3	2025-02-20	0.588	1.06
SP-E-IN	Influent	SP-E-IN	L2759053-3	2025-02-24	0.109	1.00
SP-E-IN	Influent	SP-E-IN	L2759154-4	2025-03-07	0.159	0.947
WWTP-E-IN	Influent	WWTP-E-IN	L2759044-4	2025-02-20	0.0118	0.583
WWTP-E-IN	Influent	WWTP-E-IN	L2759053-1	2025-02-24	0.165	1.46
WWTP-E-IN	Influent	WWTP-E-IN	L2759152-1	2025-03-08	0.0609	1.67
Effluent						
SP-E-OUT	Effluent	SP-E-OUT	L2759044-1	2025-02-20	0.000921	0.522
SP-E-OUT	Effluent	SP-E-OUT-Dup	L2759044-2	2025-02-20	0.0184	0.564
SP-E-OUT	Effluent	SP-E-OUT	L2759053-4	2025-02-24	0.000453	0.652
SP-E-OUT	Effluent	SP-E-OUT	L2759154-1	2025-03-07	0.0115	0.682
SP-E-OUT	Effluent	SP-E-OUT-Dup	L2759154-2	2025-03-07	0.00513	0.685
WWTP-E-OUT	Effluent	WWTP-E-OUT	L2759044-5	2025-02-20	0.0275	0.589
WWTP-E-OUT	Effluent	WWTP-E-OUT	L2759053-2	2025-02-24	0.0108	0.538
WWTP-E-OUT	Effluent	WWTP-E-OUT	L2759152-2	2025-03-08	0	0.935

Notes:
PCDD = polychlorinated dibenzodioxins (dioxins)
PCDF = polychlorinated dibenzofurans (furans)
TEQ = toxic equivalency
Lower bound PCDD/F TEQ is the sum of the toxic equivalency results for the individual PCDD/F parameters. Non-detectable parameters are assigned a value of zero (0).
Upper bound PCDD/F TEQ is the sum of the toxic equivalency results for the individual PCDD/F parameters. Non-detectable parameters are assigned the value of the detection limit.

Table B-5: East Catchment Field Measurements Collected During the Monitoring Period (March 23 – 29).

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-NE	In-pond	2025-03-24 16:15	8.8	12.63	0.34	61.25	48.7	6.6	472	No
SP-E-NE	In-pond	2025-03-25 12:06	9.0	11.55	0.40	20.69	18.4	7.2	568	No
SP-E-IN	Influent	2025-03-23 11:40	7.5	12.77	0.35	211.25	160.6	6.8	479	No
SP-E-IN	Influent	2025-03-24 9:50	7.3	12.18	0.48	60.03	47.8	5.6	645	No
SP-E-IN	Influent	2025-03-25 12:25	9.2	11.27	0.53	2.03	4.5	6.4	745	No
SP-E-IN	Influent	2025-03-26 11:22	9.6	10.68	0.42	45.29	36.8	6.8	596	No
SP-E-IN	Influent	2025-03-27 10:46	9.7	11.13	0.25	134.76	103.5	7.3	364	No
SP-E-IN	Influent	2025-03-28 11:07	10.2	11.25	0.39	115.23	88.9	6.9	562	No
SP-E-IN	Influent	2025-03-29 9:36	9.4	11.50	0.41	91.63	71.3	8.2	584	No
WWTP-E-IN	Influent	2025-03-23 11:13	7.7	12.11	0.33	56.28	45.0	6.9	450	No
WWTP-E-IN	Influent	2025-03-24 9:30	8.0	11.77	0.28	57.14	45.6	6.1	388	No
WWTP-E-IN	Influent	2025-03-25 12:11	9.2	11.43	0.43	24.14	21.0	7.3	608	No
WWTP-E-IN	Influent	2025-03-26 12:35	10.3	10.71	0.43	37.46	30.9	6.8	625	No
WWTP-E-IN	Influent	2025-03-27 10:34	10.4	10.93	0.40	50.75	40.8	7.5	582	No
WWTP-E-IN	Influent	2025-03-28 11:18	10.4	11.21	0.36	91.68	71.4	6.9	528	No
WWTP-E-IN	Influent	2025-03-29 9:50	10.0	11.48	0.57	20.44	18.2	6.9	810	No
E500GPM-IN	Influent	2025-03-23 11:45	7.4	13.15	0.33	59.87	47.7	7.1	442	No
E500GPM-IN	Influent	2025-03-24 10:29	7.2	12.85	0.28	60.24	47.9	6.3	380	No
E500GPM-IN	Influent	2025-03-26 11:17	9.9	11.94	0.52	33.89	28.3	6.9	742	No
E500GPM-IN	Influent	2025-03-27 10:25	10.5	11.25	0.01	55.99	44.8	7.6	11	No
E500GPM-IN	Influent	2025-03-28 10:59	9.8	12.4	0.36	91.18	71.0	7.1	517	No
E500GPM-IN	Influent	2025-03-29 9:16	10.0	12.34	0.58	6.08	7.5	7.2	829	No
Effluent [5]										
SP-E-OUT	Effluent	2025-03-23 11:28	6.1	13.16	0.33	1.20	3.9	7.0	439	No
SP-E-OUT	Effluent	2025-03-24 11:50	7.4	14.44	0.28	2.49	4.9	7.0	379	No
SP-E-OUT [5]	Effluent	2025-03-25 [5]	9.6 [5]	- [5]	- [5]	4.6 [5]	- [5]	6.9 [5]	- [5]	- [5]
SP-E-OUT	Effluent	2025-03-26 11:33	9.8	10.96	0.57	0.39	3.3	7.3	807	No
SP-E-OUT	Effluent	2025-03-27 10:39	9.8	11.09	0.37	0.92	3.7	7.7	535	No
SP-E-OUT [5]	Effluent	2025-03-28 [5]	11.8 [5]	- [5]	- [5]	2.9 [5]	- [5]	7.0 [5]	- [5]	- [5]
SP-E-OUT [5]	Effluent	2025-03-29 [5]	12.3 [5]	- [5]	- [5]	2.6 [5]	- [5]	7.0 [5]	- [5]	- [5]
WWTP-E-OUT	Effluent	2025-03-23 11:06	8.2	11.76	0.62	1.69	4.3	5.9	837	No
WWTP-E-OUT	Effluent	2025-03-24 10:50	7.5	12.19	0.64	1.03	3.8	7.2	846	No
WWTP-E-OUT	Effluent	2025-03-25 12:14	9.3	11.05	0.56	5.35	7.0	6.1	783	No
WWTP-E-OUT	Effluent	2025-03-26 11:51	10.9	9.08	0.75	0.33	3.2	6.4	1081	No
WWTP-E-OUT	Effluent	2025-03-27 10:28	10.6	10.50	0.52	0.80	3.6	6.5	751	No
WWTP-E-OUT	Effluent	2025-03-28 11:14	10.8	11.26	0.67	2.66	5.0	6.1	966	No
WWTP-E-OUT	Effluent	2025-03-29 9:47	10.2	9.37	0.78	0.40	3.3	6.3	1104	No
E500GPM-OUT	Effluent	2025-03-23 11:36	7.4	14.49	0.33	2.47	4.8	7.2	447	No
E500GPM-OUT	Effluent	2025-03-24 10:33	7.4	13.74	0.28	4.06	6.0	6.8	377	No
E500GPM-OUT	Effluent	2025-03-26 11:13	10.3	10.92	0.57	0.42	3.3	7.0	815	No
E500GPM-OUT	Effluent	2025-03-27 10:50	10.2	11.06	0.37	1.71	4.3	7.5	538	No
E500GPM-OUT	Effluent	2025-03-28 11:02	10.2	11.72	0.36	1.27	3.9	7.2	523	No
E500GPM-OUT	Effluent	2025-03-29 9:10	10.4	11.55	0.55	0.42	3.3	7.4	796	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) at the time of monitoring on March 25, 28, and 29, therefore daily field measurements for SP-E-OUT were not collected. Average temperature, pH, and turbidity measurements logged at the E500GPM-OUT meter box during the discharge period are reported for those days.
[6] The PE-111578 discharge limit for TSS is 25 mg/L under dry conditions and 75 mg/L for Wet Conditions. The discharge limit for Wet Conditions applied on March 23, 24, 27, 28, and 29.

Table B-6: East Catchment Daily Discharge Volumes for the Monitoring Period (March 23 – 29).

	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				
2025-03-23	0	1,544 [2]	604 [3]	665
2025-03-24	0	2,226 [2]	641 [3]	2,226
2025-03-25	0	350 [2]	677 [3]	350
2025-03-26	0	1,031 [2]	671 [3]	957
2025-03-27	0	2,081 [2]	675 [3]	1,884
2025-03-28	0	2,102 [2]	728 [3]	870
2025-03-29	0	2,020 [2]	708 [3]	727

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 m^3/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 .
[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
					VA25A6436-006
		Long Term	Short Term		2025-03-24 15:20
General Parameters					
pH - Field	pH units	- [2]	-	5.5 - 9.0	8.9
Conductivity - Field	µS/cm	-	-	-	90
Temperature - Field	°C	-	-	-	7.6
Salinity - Field	ppt	-	-	-	0.06
Turbidity - Field	NTU	-	-	-	39.45
TSS	mg/L	-	-	75 [6]	33.4
Dissolved Oxygen - Field	mg/L	≥8	-	-	12.88
Anions and Nutrients					
Sulphate	mg/L	-	-	-	18.5
Chloride	mg/L	-	-	-	3.78
Fluoride	mg/L	-	1.5	-	0.058
Ammonia (N-NH_3)	mg/L	0.5 [3]	3.3 [3]	-	0.0164
Nitrite (N-NO_2)	mg/L	-	-	-	0.0122
Nitrate (N-NO_3)	mg/L	3.7	339	-	1.11
Total Metals					
Aluminum, total (T-Al)	mg/L	-	-	-	2.68
Antimony, total (T-Sb)	mg/L	-	0.27 [4]	-	0.00123
Arsenic, total (T-As)	mg/L	0.0125	0.0125	-	0.00247
Barium, total (T-Ba)	mg/L	-	-	-	0.0276
Beryllium, total (T-Be)	mg/L	0.1	-	-	0.000044
Boron, total (T-B)	mg/L	1.2	-	-	0.02
Cadmium, total (T-Cd)	mg/L	0.00012	-	-	0.0000562
Chromium, total (T-Cr)	mg/L	-	-	-	0.00233
Cobalt, total (T-Co)	mg/L	-	-	-	0.00072
Copper, total (T-Cu)	mg/L	- [2]	- [2]	0.0043	0.00529
Iron, total (T-Fe)	mg/L	-	-	-	1.84
Lead, total (T-Pb)	mg/L	- [2]	- [2]	0.0035	0.00395
Manganese, total (T-Mn)	mg/L	-	-	-	0.0597
Mercury, total (T-Hg)	mg/L	0.000016 [5]	-	-	0.00000775
Molybdenum, total (T-Mo)	mg/L	-	-	-	0.0258
Nickel, total (T-Ni)	mg/L	0.0083	-	-	0.00098
Selenium, total (T-Se)	mg/L	0.002	-	-	0.000167
Silver, total (T-Ag)	mg/L	0.0005	0.0037	-	0.000018
Thallium, total (T-Tl)	mg/L	-	-	-	0.000018
Uranium, total (T-U)	mg/L	-	-	-	0.00671
Vanadium, total (T-V)	mg/L	- [2]	-	0.0081	0.00621
Zinc, total (T-Zn)	mg/L	- [2]	- [2]	0.0133	0.0138
Hexavalent Chromium, total	mg/L	0.0015	-	-	0.00092
Dissolved Metals					
Cadmium, dissolved (D-Cd)	mg/L	-	-	-	<0.0000100
Copper, dissolved (D-Cu)	mg/L	-	-	-	0.00137
Iron, dissolved (D-Fe)	mg/L	-	-	-	<0.010
Lead, dissolved (D-Pb)	mg/L	-	-	-	<0.000050
Manganese, dissolved (D-Mn)	mg/L	-	-	-	0.00228
Nickel, dissolved (D-Ni)	mg/L	-	-	-	<0.00050
Strontium, dissolved (D-Sr)	mg/L	-	-	-	0.0568
Vanadium, dissolved (D-V)	mg/L	-	-	-	0.0028
Zinc, dissolved (D-Zn)	mg/L	-	-	-	<0.0010
Polycyclic Aromatic Hydrocarbons (PAHs)					
Acenaphthene	mg/L	0.006	-	-	0.000038
Acridine	mg/L	-	-	-	<0.000010
Anthracene	mg/L	-	-	-	<0.000010
Benz(a)anthracene	mg/L	-	-	-	<0.000010
Benzo(a)pyrene	mg/L	0.00001	-	-	0.0000056
Chrysene	mg/L	0.0001	-	-	<0.000010
Fluoranthene	mg/L	-	-	-	0.000042
Fluorene	mg/L	0.012	-	-	0.000017
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	-	-	-	0.000028
Pyrene	mg/L	-	-	-	0.000036
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 discharged each day during the monitoring period (March 23 – March 29).
[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. The discharge limit for Wet Conditions applied on March 23, 24, 27, 28, and 29.

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 SP-W-OUT
					Influent
					SP-W-OUT
					VA25A6436-007
		Long Term	Short Term		2025-03-24 14:40
General Parameters					
pH - Field	pH units	- [2]	-	5.5 - 9.0	8.2
Conductivity - Field	µS/cm	-	-	-	94
Temperature - Field	°C	-	-	-	9.4
Salinity - Field	ppt	-	-	-	0.06
Turbidity - Field	NTU	-	-	-	3.19
TSS	mg/L	-	-	75 [6]	<3.0
Dissolved Oxygen - Field	mg/L	≥8	-	-	12.89
Anions and Nutrients					
Sulphate	mg/L	-	-	-	18.0
Chloride	mg/L	-	-	-	3.76
Fluoride	mg/L	-	1.5	-	0.055
Ammonia (N-NH_3)	mg/L	1.8 [3]	12 [3]	-	0.0116
Nitrite (N-NO_2)	mg/L	-	-	-	0.012
Nitrate (N-NO_3)	mg/L	3.7	339	-	0.911
Total Metals					
Aluminum, total (T-Al)	mg/L	-	-	-	0.216
Antimony, total (T-Sb)	mg/L	-	0.27 [4]	-	0.0011
Arsenic, total (T-As)	mg/L	0.0125	0.0125	-	0.00172
Barium, total (T-Ba)	mg/L	-	-	-	0.00262
Beryllium, total (T-Be)	mg/L	0.1	-	-	<0.000020
Boron, total (T-B)	mg/L	1.2	-	-	0.016
Cadmium, total (T-Cd)	mg/L	0.00012	-	-	<0.0000150
Chromium, total (T-Cr)	mg/L	-	-	-	0.00103
Cobalt, total (T-Co)	mg/L	-	-	-	<0.00010
Copper, total (T-Cu)	mg/L	- [2]	- [2]	0.0043	0.00142
Iron, total (T-Fe)	mg/L	-	-	-	0.053
Lead, total (T-Pb)	mg/L	- [2]	- [2]	0.0035	0.0002
Manganese, total (T-Mn)	mg/L	-	-	-	0.00221
Mercury, total (T-Hg)	mg/L	0.000016 [5]	-	-	0.00000154
Molybdenum, total (T-Mo)	mg/L	-	-	-	0.025
Nickel, total (T-Ni)	mg/L	0.0083	-	-	<0.00050
Selenium, total (T-Se)	mg/L	0.002	-	-	0.000168
Silver, total (T-Ag)	mg/L	0.0005	0.0037	-	<0.000010
Thallium, total (T-Tl)	mg/L	-	-	-	<0.000010
Uranium, total (T-U)	mg/L	-	-	-	0.00567
Vanadium, total (T-V)	mg/L	- [2]	-	0.0081	0.00284
Zinc, total (T-Zn)	mg/L	- [2]	- [2]	0.0133	0.0034
Hexavalent Chromium, total	mg/L	0.0015	-	-	0.00102
Dissolved Metals					
Cadmium, dissolved (D-Cd)	mg/L	-	-	-	<0.0000100
Copper, dissolved (D-Cu)	mg/L	-	-	-	0.00123
Iron, dissolved (D-Fe)	mg/L	-	-	-	0.014
Lead, dissolved (D-Pb)	mg/L	-	-	-	0.000062
Manganese, dissolved (D-Mn)	mg/L	-	-	-	0.00111
Nickel, dissolved (D-Ni)	mg/L	-	-	-	<0.00050
Strontium, dissolved (D-Sr)	mg/L	-	-	-	0.0533
Vanadium, dissolved (D-V)	mg/L	-	-	-	0.0027
Zinc, dissolved (D-Zn)	mg/L	-	-	-	0.0027
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 discharged each day during the monitoring period (March 23 – March 29).
[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. The discharge limit for Wet Conditions applied on March 23, 24, 27, 28, and 29.

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]	0.0044 – 0.012 [3,4]
Station	**Water Type**	**Sample ID**	**Lab ID**	**Sampling Date**		
Influent						
SP-W-IN	Influent	SP-W-IN	VA25A5937-002	2025-03-18	0.0000252	0.00169
SP-W-IN	Influent	SP-W-IN	VA25A6436-006	2025-03-24	0.000064	0.00775
Effluent						
SP-W-OUT	Effluent	SP-W-OUT	VA25A5937-001	2025-03-18	0.0000249	0.000880
SP-W-OUT	Effluent	SP-W-OUT	VA25A6436-007	2025-03-24	0.000028	0.00154

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

Parameter					**Lower Bound PCDD/F TEQ**	**Upper Bound PCDD/F TEQ**
Unit					**pg/L**	**pg/L**
Station	**Water Type**	**Sample ID**	**Lab ID**	**Sampling Date**		
Influent						
SP-W-IN	Influent	SP-W-IN	L2758993-1	2025-02-18	0.00143	1.54
SP-W-IN	Influent	SP-W-IN	L2759053-5	2025-02-24	0.0718	0.867
Effluent						
SP-W-OUT	Effluent	SP-W-OUT	L2758993-2	2025-02-18	0	1.29
SP-W-OUT	Effluent	SP-W-OUT	L2759053-6	2025-02-24	0.000534	0.967

Notes:
PCDD = polychlorinated dibenzodioxins (dioxins)
PCDF = polychlorinated dibenzofurans (furans)
TEQ = toxic equivalency
Lower bound PCDD/F TEQ is the sum of the toxic equivalency results for the individual PCDD/F parameters. Non-detectable parameters are assigned a value of zero (0).
Upper bound PCDD/F TEQ is the sum of the toxic equivalency results for the individual PCDD/F parameters. Non-detectable parameters are assigned the value of the detection limit.

Table C-5: West Catchment Field Measurements Collected During the Monitoring Period (March 23 – 29).

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-E	In-pond	2025-03-24 15:37	6.0	13.03	0.06	39.39	32.4	8.8	91	No
SP-W-E	In-pond	2025-03-25 11:49	7.9	12.29	0.06	20.62	18.4	8.3	85	No
SP-W-IN	Influent	2025-03-23 10:38	6.2	13.07	0.06	132.72	102	8.1	78	No
SP-W-IN	Influent	2025-03-24 15:20	7.6	12.88	0.06	39.45	32.4	8.9	90	No
SP-W-IN	Influent	2025-03-25 15:50	8.8	11.94	0.07	80.29	62.9	9.0	107	No
SP-W-IN	Influent	2025-03-26 15:11	9.1	11.83	0.07	28.15	24.0	8.7	104	No
SP-W-IN	Influent	2025-03-27 14:26	9.8	12.04	0.06	49.07	39.6	8.8	96	No
SP-W-IN	Influent	2025-03-28 9:54	8.9	12.17	0.06	51.30	41.3	8.4	39	No
SP-W-IN	Influent	2025-03-29 14:49	9.6	11.91	0.08	39.12	32.2	7.9	112	No
W500GPM-IN	Influent	2025-03-23 10:36	7.0	12.91	0.06	110.21	85.2	7.9	77	No
W500GPM-IN	Influent	2025-03-24 13:58	7.3	13.16	0.06	35.87	29.8	8.4	89	No
W500GPM-IN	Influent	2025-03-25 15:41	9.2	12.02	0.06	37.28	30.8	8.8	89	No
W500GPM-IN	Influent	2025-03-26 15:07	9.5	11.94	0.06	22.23	19.6	8.4	92	No
W500GPM-IN	Influent	2025-03-27 14:22	10.4	12.09	0.06	87.94	68.6	8.6	89	No
W500GPM-IN	Influent	2025-03-28 9:47	11.1	11.46	0.06	68.12	53.8	8.1	96	No
Effluent [5]										
SP-W-OUT	Effluent	2025-03-23 10:42	6.1	13.62	0.06	2.99	5.2	8.0	81	No
SP-W-OUT	Effluent	2025-03-24 14:40	9.4	12.89	0.06	3.19	5.4	8.2	94	No
SP-W-OUT	Effluent	2025-03-25 15:56	9.0	12.45	0.06	3.29	5.5	8.3	87	No
SP-W-OUT	Effluent	2025-03-26 14:51	10.0	14.06	0.06	4.73	6.5	8.1	92	No
SP-W-OUT	Effluent	2025-03-27 14:38	10.4	14.05	0.06	3.27	5.4	6.5	90	No
SP-W-OUT	Effluent	2025-03-28 9:59	9.2	12.15	0.06	3.41	5.5	8.3	92	No
SP-W-OUT [5]	Effluent	2025-03-29 [5]	7.3 [5]	- [5]	- [5]	3.3 [5]	- [5]	7.1 [5]	- [5]	- [5]
W500GPM-OUT	Effluent	2025-03-23 10:31	7.4	13.63	0.06	3.55	5.6	7.7	83	No
W500GPM-OUT	Effluent	2025-03-24 14:07	7.6	14.86	0.06	2.64	5.0	6.8	89	No
W500GPM-OUT	Effluent	2025-03-25 17:49	9.1	12.24	0.06	2.66	5.0	6.4	91	No
W500GPM-OUT	Effluent	2025-03-26 15:03	9.6	14.31	0.06	3.77	5.8	8.3	91	No
W500GPM-OUT	Effluent	2025-03-27 14:13	10.7	12.17	0.06	2.91	5.2	6.4	91	No
W500GPM-OUT	Effluent	2025-03-28 9:51	9.5	12.11	0.06	3.46	5.6	8.2	92	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 at the time of monitoring on March 29, therefore daily field measurements for SP-W-OUT were not collected. Average temperature, pH, and turbidity measurements logged at the W500GPM-OUT meter box during the discharge period are reported for those days.
[6] The PE-111578 discharge limit for TSS is 25 mg/L under dry conditions and 75 mg/L for Wet Conditions. The discharge limit for Wet Conditions applied on March 23, 24, 27, 28, and 29.

Table C-6: West Catchment Daily Discharge Volumes for the Monitoring Period (March 23 – 29).

	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					
2025-03-23	0	1,976 [3]	0	0	1,897
2025-03-24	0	3,231 [3]	0	0	3,231
2025-03-25	0	1,553 [3]	0	0	1,553
2025-03-26	0	1,740 [3]	0	0	1,740
2025-03-27	0	2,906 [3]	0	0	2,906
2025-03-28	0	1,889 [3]	0	0	1,593
2025-03-29	0	1,047 [3]	0	0	1,047

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 m^3/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.

Appendix D: Freshwater Receiving Environment Results

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

Parameter	Unit	Lowest Applicable Guideline [1, 2]		Station SW-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
				VA25A6069-001	VA25A5938-001	VA25A5938-003	VA25A6069-002
		Long Term	Short Term	2025-03-19 9:25	2025-03-18 14:25	2025-03-18 11:00	2025-03-19 10:30
General Parameters							
pH - Field	pH units	6.5 - 9.0	-	6.6	7.05	6.6	7.7
Specific Conductivity - Field	µS/cm	-	-	6.0	13	14	61
Temperature - Field	℃	-	-	3.2	4.8	7.4	7.2
Salinity - Field	ppt	-	-	0	0.01	0.01	0.04
Turbidity - Field	NTU	-	-	0.26	0.22	0.20	1.29
TSS	mg/L	-	-	<3.0	<3.0	<3.0	<3.0
Dissolved Oxygen - Field	mg/L	>=8	>=5	13.60	13.43	12.85	12.15
Anions and Nutrients							
Sulphate [2]	mg/L	128	-	0.64	3.38	3.60	4.78
Chloride	mg/L	120	600	0.70	1.02	1.57	5.73
Fluoride [2]	mg/L	-	0.40	<0.020	<0.020	<0.020	0.092
Ammonia ($N\text{-}NH_3$) [2]	mg/L	1.54-23.1	9.92-26.8	0.0053	<0.0050	<0.0050	0.0135
Nitrite ($N\text{-}NO_2$) [2]	mg/L	0.020-0.060	0.060-0.18	<0.0010	<0.0010	<0.0010	0.0013
Nitrate ($N\text{-}NO_3$)	mg/L	3	32.8	0.0360	0.0645	0.0658	0.0181
Total Metals							
Aluminum, total (T-Al) [2]	mg/L	0.026-0.15	-	***0.132***	***0.0618***	***0.0848***	0.0808
Antimony, total (T-Sb)	mg/L	0.074	-	<0.00010	<0.00010	<0.00010	0.000287
Arsenic, total (T-As)	mg/L	0.005	-	<0.00010	<0.00010	<0.00010	0.00027
Barium, total (T-Ba)	mg/L	1	-	0.0018	0.00307	0.00271	0.00623
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	0.0111	0.012	<0.010
Cadmium, total (T-Cd) [2]	mg/L	0.000036-0.000062	0.00011-0.00066	<0.0000050	0.00000864	0.0000116	<0.0000050
Chromium, total (T-Cr) [4]	mg/L	0.001	-	<0.00050	<0.00050	<0.00050	<0.00050
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	0.000677
Iron, total (T-Fe)	mg/L	0.3	1	0.0316	<0.010	0.0229	0.0567
Lead, total (T-Pb)	mg/L	-	-	<0.000050	<0.000050	<0.000050	<0.000050
Manganese, total (T-Mn) [2]	mg/L	0.768	0.816-0.893	0.000758	0.000697	0.00123	0.00695
Mercury, total (T-Hg) [3]	mg/L	0.00002	-	0.00000133	0.00000067	0.00000073	0.00000082
Molybdenum, total (T-Mo)	mg/L	0.073	46	0.000279	0.000533	0.000412	0.00906
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	0.0000574
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	0.000623	0.000132	0.000127	0.000321
Vanadium, total (T-V)	mg/L	0.12	-	<0.00050	<0.00050	<0.00050	<0.00050
Zinc, total (T-Zn)	mg/L	-	-	0.00333	<0.0030	0.00348	<0.0030
Hexavalent Chromium, total	mg/L	0.001	-	<0.00050	<0.00050	<0.00050	<0.00050
Dissolved Metals							
Cadmium, dissolved (D-Cd) [2]	mg/L	0.000018-0.000091	0.000038-0.00018	<0.0000050	0.00000601	0.00000608	0.00000866
Copper, dissolved (D-Cu) [2]	mg/L	0.00020-0.00064	0.00020-0.0038	***0.000274***	***0.000287***	***0.000261***	0.000424
Iron, dissolved (D-Fe)	mg/L	-	0.35	0.0247	<0.010	<0.010	0.0114
Lead, dissolved (D-Pb) [2]	mg/L	0.0025-0.0044	-	<0.000050	<0.000050	<0.000050	0.0000538
Manganese, dissolved (D-Mn) [2]	mg/L	0.32-0.38	1.97-2.45	0.000703	0.000521	0.00069	0.00542
Nickel, dissolved (D-Ni) [2]	mg/L	0.00060-0.0012	0.0093-0.013	<0.00050	<0.00050	<0.00050	<0.00050
Strontium, dissolved (D-Sr)	mg/L	2.5	-	0.00387	0.00905	0.00828	0.03
Vanadium, dissolved (D-V)	mg/L	-	-	<0.00050	<0.00050	<0.00050	<0.00050
Zinc, dissolved (D-Zn) [2]	mg/L	0.0033-0.0080	0.0081-0.018	<0.0010	<0.0010	0.00119	0.00218
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	0.000043
2-methylnaphthalene	mg/L	-	-	<0.000010	<0.000010	<0.000010	0.000048
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 D-2: Freshwater Methylmercury and Corresponding Total Mercury Results Received at the Time of Reporting.

Parameter					**Total Methylmercury**	**Total Mercury**
Unit					**µg/L**	**µg/L**
Lowest Applicable Guideline[1]					0.0001 [2]	0.02 [3,4]
Station	**Water Type**	**Sample ID**	**Lab ID**	**Sampling Date**		
SW-02	Upper Reach of Mill Creek (upstream of the third bridge)	SW-02	VA25A5938-001	2025-03-18	<0.000020	0.00067
SW-07	Upstream Mill Creek (at the diversion inlet)	SW-07	VA25A5938-003	2025-03-18	<0.000020	0.00073

Notes:
Results ***underlined in bold italics*** exceed the applicable long-term water quality guideline for the protection of freshwater aquatic life.
[1] The lowest applicable guidelines from approved or working BC WQGs, Canadian (CCME) WQGs and Federal WQGs.
[2] From BC Ambient Water Quality Guidelines for Mercury Overview Report. The methylmercury concentration threshold of 0.0001 µg/L (0.1 ng/L) is indicated as a WQG for the protection of wildlife and is set at a concentration that protects fish from mercury bioaccumulation to a level that may harm wildlife that consume fish.
[3] CCME guideline for total mercury = 0.026 µg/L.
[4] When MeHg ≤ 0.5% of total Hg, BC WQG = 0.02 µg/L. When MeHg > 0.5% of total Hg, BC WQG = 0.0001/(MeHg/Total Hg). Detection limit values are used to calculate the WQG for result reported as not detected.
Non-detect results are screened using the detection limit value.

Table D-3: Freshwater Dioxin and Furan Toxicity Equivalency Quantity (TEQ) Results Received at the Time of Reporting.

Parameter					**Lower Bound PCDD/F TEQ**	**Upper Bound PCDD/F TEQ**
Unit					**pg/L**	**pg/L**
Station	**Water Type**	**Sample ID**	**Lab ID**	**Sampling Date**		
SW-01	Lower Reach of Woodfibre Creek (near the mouth)	SW-01	L2759042-1	2025-02-21	0.000831	1.39
SW-02	Upper Reach of Mill Creek (upstream of the third bridge)	SW-02	L2759009-1	2025-02-19	0.00265	0.595
SW-07	Upstream Mill Creek (at the diversion inlet)	SW-07	L2759009-3	2025-02-19	0.0526	0.431
SW-04	Lower Reach of East Creek (near the outlet to the outfall culvert)	SW-04	L2759042-2	2025-02-21	0.0305	1.73

Notes:
PCDD = polychlorinated dibenzodioxins (dioxins)
PCDF = polychlorinated dibenzofurans (furans)
TEQ = toxic equivalency
Lower bound PCDD/F TEQ is the sum of the toxic equivalency results for the individual PCDD/F parameters. Non-detectable parameters are assigned a value of zero (0).
Upper bound PCDD/F TEQ is the sum of the toxic equivalency results for the individual PCDD/F parameters. Non-detectable parameters are assigned the value of the detection limit.

Appendix E: Estuarine Water Receiving Environment Results

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

Parameter	Unit	Lowest Applicable Guideline [1]		Station SW-03 Mill Creek Estuary SW-03 VA25A5938-002 2025-03-18 14:45
		Long Term	Short Term	
General Parameters				
pH - Field	pH units	7.0 - 8.7	-	***6.7***
Specific Conductivity - Field	µS/cm	-	-	395
Temperature - Field	°C	-	-	4.5
Salinity - Field	ppt	-	-	0.3
Turbidity - Field	NTU	-	-	0.27
TSS	mg/L	-	-	<3.0
Dissolved Oxygen - Field	mg/L	-	-	13.32
Anions and Nutrients				
Sulphate	mg/L	-	-	71.6
Chloride	mg/L	-	-	528
Fluoride	mg/L	-	-	<0.200
Ammonia (N-NH_3)	mg/L	-	-	0.00651
Nitrite (N-NO_2)	mg/L	-	-	<0.0100
Nitrate (N-NO_3)	mg/L	-	-	0.0892
Total Metals				
Aluminum, total (T-Al)	mg/L	-	-	0.0646
Antimony, total (T-Sb)	mg/L	-	-	<0.00010
Arsenic, total (T-As)	mg/L	-	-	0.000124
Barium, total (T-Ba)	mg/L	-	-	0.00434
Beryllium, total (T-Be)	mg/L	-	-	<0.000020
Boron, total (T-B)	mg/L	-	-	0.125
Cadmium, total (T-Cd)	mg/L	-	-	0.0000172
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	0.000548
Iron, total (T-Fe)	mg/L	-	-	0.0172
Lead, total (T-Pb)	mg/L	0.002	0.14	<0.000050
Manganese, total (T-Mn)	mg/L	-	-	0.0713
Mercury, total (T-Hg) [2]	mg/L	0.00002	-	0.00000067
Molybdenum, total (T-Mo)	mg/L	-	-	0.00112
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	-	-	0.000392
Vanadium, total (T-V)	mg/L	-	-	<0.00050
Zinc, total (T-Zn)	mg/L	-	-	<0.0030
Hexavalent Chromium, total	mg/L	-	-	<0.00050
Dissolved Metals				
Cadmium, dissolved (D-Cd)	mg/L	-	-	0.000014
Copper, dissolved (D-Cu)	mg/L	-	-	0.000271
Iron, dissolved (D-Fe)	mg/L	-	-	<0.010
Lead, dissolved (D-Pb)	mg/L	-	-	<0.000050
Manganese, dissolved (D-Mn)	mg/L	-	-	0.109
Nickel, dissolved (D-Ni)	mg/L	-	-	<0.00050
Strontium, dissolved (D-Sr)	mg/L	-	-	0.245
Vanadium, dissolved (D-V)	mg/L	-	-	<0.00050
Zinc, dissolved (D-Zn)	mg/L	-	-	0.00124
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.

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

Parameter					**Total Methylmercury**	**Total Mercury**
Unit					**µg/L**	**µg/L**
Lowest Applicable Guideline[1]					0.0001 [2]	0.0046 [3,4]
Station	**Water Type**	**Sample ID**	**Lab ID**	**Sampling Date**		
SW-03	Mill Creek Estuary	SW-03	VA25A5938-002	2025-03-18	<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.

Table E-3: Estuarine Water Dioxin and Furan Toxicity Equivalency Quantity (TEQ) Results Received at the Time of Reporting.

Parameter					**Lower Bound PCDD/F TEQ**	**Upper Bound PCDD/F TEQ**
Unit					**pg/L**	**pg/L**
Station	**Water Type**	**Sample ID**	**Lab ID**	**Sampling Date**		
SW-03	Mill Creek Estuary	SW-03	L2759009-2	2025-02-19	0.0474	0.533

Notes:
PCDD = polychlorinated dibenzodioxins (dioxins)
PCDF = polychlorinated dibenzofurans (furans)
TEQ = toxic equivalency
Lower bound PCDD/F TEQ is the sum of the toxic equivalency results for the individual PCDD/F parameters. Non-detectable parameters are assigned a value of zero (0).
Upper bound PCDD/F TEQ is the sum of the toxic equivalency results for the individual PCDD/F parameters. Non-detectable parameters are assigned the value of the detection limit.

Appendix F: Marine Water Receiving Environment Results

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

Parameter	Unit	Lowest Applicable Guideline [1]		Station IDZ-E1	Station IDZ-E1	Station IDZ-W1	Station IDZ-W2	Reference Station WQR1	Reference Station WQR2
				0.5 m Below Surface	0.5 m Below Surface	0.5 m Below Surface	0.5 m Below Surface	0.5 m Below Surface	0.5 m Below Surface
				IDZ-E1-0.5	IDZ-E2-0.5	IDZ-W1-0.5	IDZ-W2-0.5	WQR1-0.5	WQR2-0.5
				VA25A6528-001	VA25A6528-004	VA25A6528-007	VA25A6528-010	VA25A6528-013	VA25A6528-016
		Long Term	Short Term	2025-03-25 11:05	2025-03-25 11:45	2025-03-25 14:10	2025-03-25 13:40	2025-03-25 15:20	2025-03-25 14:45
General Parameters									
pH - Field	pH units	7.0 - 8.7	-	8.10	8.13	8.27	8.29	8.25	8.19
Specific Conductivity - Field	µS/cm	-	-	12473	12430	16901	15614	16482	15756
Temperature - Field	℃	-	-	6.7	6.7	7.0	6.9	7.0	7.1
Salinity - Field	ppt	Narrative [2]	-	11.32	11.29	15.58	14.35	15.18	14.4
Turbidity - Field	NTU	3.46 [2]	9.46 [2]	1.35	1.22	1.33	1.46	1.46	1.31
TSS	mg/L	7.0 [2]	27.0 [2]	<2.0	<2.0	<2.0	<2.0	<2.0	2.0
Dissolved Oxygen - Field	mg/L	>=8	-	11.81	12.18	12.57	12.71	12.41	11.54
Anions and Nutrients									
Sulphate	mg/L	-	-	793	715	951	662	894	961
Chloride	mg/L	-	-	6130	5600	7270	5310	6840	7400
Fluoride	mg/L	-	1.5	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Ammonia (N-NH_3)	mg/L	1.8-2.9 [3]	12-19 [3]	0.0138	0.0106	0.0081	0.008	0.0071	0.0086
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	-	-	0.0856	0.0895	0.058	0.0807	0.059	0.0599
Antimony, total (T-Sb)	mg/L	-	0.27 [4]	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010
Arsenic, total (T-As)	mg/L	0.0125	0.0125	0.00065	0.00058	0.00077	0.00054	0.00071	0.00075
Barium, total (T-Ba)	mg/L	-	-	0.0073	0.0068	0.0071	0.0067	0.0075	0.0072
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	-	***1.60***	***1.44***	***1.96***	***1.34***	***1.73***	***1.94***
Cadmium, total (T-Cd)	mg/L	0.00012	-	0.000036	0.000033	0.000027	0.000022	0.00003	0.000032
Chromium, total (T-Cr)	mg/L	-	-	<0.00050	0.00075	<0.00050	<0.00050	<0.00050	<0.00050
Cobalt, total (T-Co)	mg/L	-	-	0.000087	0.000081	0.000082	0.000074	0.000083	0.000083
Copper, total (T-Cu)	mg/L	0.002	0.003	0.00079	0.0007	0.00062	0.0006	0.00065	0.00061
Iron, total (T-Fe)	mg/L	-	-	0.114	0.115	0.103	0.107	0.107	0.100
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	-	-	0.00757	0.00728	0.00685	0.00741	0.00761	0.00692
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	-	-	0.00413	0.00372	0.00465	0.0035	0.00447	0.00451
Nickel, total (T-Ni)	mg/L	0.0083	-	<0.00050	0.00069	<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	-	-	0.00105	0.001	0.0013	0.000931	0.00117	0.00121
Vanadium, total (T-V)	mg/L	0.005	-	0.00081	0.00074	0.00089	0.00063	0.00085	0.00088
Zinc, total (T-Zn)	mg/L	0.01	0.055	<0.0030	<0.0030	<0.0030	<0.0030	0.0069	<0.0030
Hexavalent Chromium, total	mg/L	0.0015	-	-	-	-	-	-	-
Dissolved Metals									
Cadmium, dissolved (D-Cd)	mg/L	-	-	0.000032	0.000026	0.000027	0.000031	0.000038	0.000031
Copper, dissolved (D-Cu)	mg/L	-	-	0.0005	<0.00050	<0.00050	<0.00050	0.00068	<0.00050
Iron, dissolved (D-Fe)	mg/L	-	-	0.02	0.018	0.024	0.018	0.022	0.022
Lead, dissolved (D-Pb)	mg/L	-	-	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010
Manganese, dissolved (D-Mn)	mg/L	-	-	0.00657	0.00581	0.00644	0.00508	0.00628	0.00627
Nickel, dissolved (D-Ni)	mg/L	-	-	<0.00050	<0.00050	<0.00050	<0.00050	0.00224	<0.00050
Strontium, dissolved (D-Sr)	mg/L	-	-	2.70	2.00	1.96	3.30	3.05	2.16
Vanadium, dissolved (D-V)	mg/L	-	-	0.00068	0.00055	0.0005	0.00073	0.00073	0.00054
Zinc, dissolved (D-Zn)	mg/L	-	-	0.0014	0.0014	<0.0010	<0.0010	<0.0010	<0.0010
Polycyclic Aromatic Hydrocarbons (PAHs)									
Acenaphthene	mg/L	0.006	-	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010
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	-	-	-	-	-	-	-
Ethylbenzene	mg/L	0.25	-	-	-	-	-	-	-
Methyl-tert-butyl-ether	mg/L	5	0.44	-	-	-	-	-	-
Styrene	mg/L	-	-	-	-	-	-	-	-
Toluene	mg/L	0.215	-	-	-	-	-	-	-
Total Xylenes	mg/L	-	-	-	-	-	-	-	-
Chlorobenzene	mg/L	0.025	-	-	-	-	-	-	-
1,2-Dichlorobenzene	mg/L	0.042	-	-	-	-	-	-	-

Notes:

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 discharging, therefore the turbidity and TSS WQGs were evaluated. Background values used to evaluate the March 25 IDZ-E1, IDZ-E2, IDZ-W1 and IDZ-W2 samples collected at 0.5 m below surface are the maximum values measured in the March 25 WQR1 and WQR2 reference station samples at 0.5 m below the surface (1.46 NTU and 2.0 mg TSS/L; Report #57).

[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 F-2: 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
				VA25A5940-001	VA25A5940-002	VA25A5940-003	VA25A5940-004	VA25A5940-005	VA25A5940-006
		Long Term	Short Term	2025-03-18 9:43	2025-03-18 9:45	2025-03-18 9:47	2025-03-18 9:55	2025-03-18 9:57	2025-03-18 9:59
General Parameters									
pH - Field	pH units	7.0 - 8.7	-	8.30	8.34	7.80	8.21	8.32	7.65
Specific Conductivity - Field	µS/cm	-	-	13051	23706	28510	8479	24194	29584
Temperature - Field	℃	-	-	6.0	7.5	7.5	5.4	7.5	7.4
Salinity - Field	ppt	Narrative [2]	-	12.13	22.27	27.25	7.76	22.75	28.42
Turbidity - Field	NTU	2.65-3.23 [2]	8.65-9.23 [2]	1.70	2.08	1.16	1.36	2.03	0.96
TSS	mg/L	7.0-12.4 [2]	27.0-32.4 [2]	<2.0	5.4	<2.0	<2.0	8.8	4.7
Dissolved Oxygen - Field	mg/L	≥8	-	12.84	14.17	10.53	12.63	13.44	9.35

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 discharging, therefore the turbidity and TSS WQGs were evaluated. Background values used to evaluate the March 18 IDZ-E1 and IDZ-E2 samples are the maximum values measured in the March 12 and 13 WQR2 and WQR1 reference station samples, respectively, at 0.5 and 2 m below the surface and 2 m above the seafloor (Report #56 and #55, respectively).

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

Parameter	Unit	Lowest Applicable Guideline [1]		Station IDZ-W1			Station IDZ-W2		
				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-W1-0.5	IDZ-W1-2m	IDZ-W1-SF	IDZ-W2-0.5	IDZ-W2-2m	IDZ-W2-SF
				VA25A5940-007	VA25A5940-008	VA25A5940-009	VA25A5940-010	VA25A5940-011	VA25A5940-012
		Long Term	Short Term	2025-03-18 11:30	2025-03-18 11:32	2025-03-18 11:34	2025-03-18 11:40	2025-03-18 11:42	2025-03-18 11:44
General Parameters									
pH - Field	pH units	7.0 - 8.7	-	8.14	8.39	7.49	8.12	8.28	7.48
Specific Conductivity - Field	µS/cm	-	-	7815	24580	30856	8210	25246	30993
Temperature - Field	℃	-	-	5.7	7.6	8.1	5.8	7.6	8.2
Salinity - Field	ppt	Narrative [2]	-	7.05	23.07	29.22	7.40	23.74	29.28
Turbidity - Field	NTU	2.65-3.23 [2]	8.65-9.23 [2]	1.28	2.02	0.83	1.14	1.51	0.98
TSS	mg/L	7.0-12.4 [2]	27.0-32.4 [2]	<2.0	4.9	<2.0	<2.0	5.3	<2.0
Dissolved Oxygen - Field	mg/L	≥8	-	12.24	14.05	***7.35***	12.37	13.59	***7.03***

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 discharging, therefore the turbidity and TSS WQGs were evaluated. Background values used to evaluate the March 18 IDZ-W1 and IDZ-W2 samples are the maximum values measured in the March 12 and 13 WQR2 and WQR1 reference station samples, respectively, at 0.5 and 2 m below the surface and 2 m above the seafloor (Report #56 and #55, respectively).

Table F-4: Summary of Marine Water Quality Results Received at the Time of Reporting

Parameter	Unit	Lowest Applicable Guideline [1]		Station IDZ-E1		Station IDZ-E2	
				2 m Below Surface	2 m Above Seafloor	2 m Below Surface	2 m Above Seafloor
				IDZ-E1-2m	IDZ-E1-SF	IDZ-E2-2m	IDZ-E2-SF
				VA25A6528-002	VA25A6528-003	VA25A6528-005	VA25A6528-006
		Long Term	Short Term	2025-03-25 12:22	2025-03-25 12:24	2025-03-25 12:15	2025-03-25 12:17
General Parameters							
pH - Field	pH units	7.0 - 8.7	-	8.15	7.60	8.13	7.57
Specific Conductivity - Field	µS/cm	-	-	25904	29527	24271	31103
Temperature - Field	℃	-	-	7.7	7.5	7.6	8.3
Salinity - Field	ppt	Narrative [2]	-	24.41	28.32	22.78	29.33
Turbidity - Field	NTU	2.65-3.23 [2]	8.65-9.23 [2]	0.95	0.98	1.33	0.86
TSS	mg/L	7.0-12.4 [2]	27.0-32.4 [2]	2.1	2.3	2.0	<2.0
Dissolved Oxygen - Field	mg/L	≥8	-	11.58	8.68	11.63	***6.72***

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 discharging, therefore the turbidity and TSS WQGs were evaluated. Background values used to evaluate the March 25 IDZ-E1 and IDZ-E2 samples are the maximum values measured in the March 12 and 13 WQR2 and WQR1 reference station samples, respectively, at 0.5 and 2 m below the surface and 2 m above the seafloor (Report #56 and #55, respectively).

Table F-5: Summary of Marine Water Quality Results Received at the Time of Reporting

Parameter	Unit	Lowest Applicable Guideline [1]		Station IDZ-W1		Station IDZ-W2	
				2 m Below Surface	2 m Above Seafloor	2 m Below Surface	2 m Above Seafloor
				IDZ-W1-2m	IDZ-W1-SF	IDZ-W2-2m	IDZ-W2-SF
				VA25A6528-008	VA25A6528-009	VA25A6528-011	VA25A6528-012
		Long Term	Short Term	2025-03-25 14:06	2025-03-25 14:08	2025-03-25 13:50	2025-03-25 13:45
General Parameters							
pH - Field	pH units	7.0 - 8.7	-	8.19	7.60	8.27	7.58
Specific Conductivity - Field	µS/cm	-	-	25731	30765	24260	31459
Temperature - Field	°C	-	-	7.7	8.1	7.5	8.5
Salinity - Field	ppt	Narrative [2]	-	24.29	29.14	22.79	29.50
Turbidity - Field	NTU	2.65-3.23 [2]	8.65-9.23 [2]	1.19	0.91	1.24	0.92
TSS	mg/L	7.0-12.4 [2]	27.0-32.4 [2]	<2.0	<2.0	<2.0	<2.0
Dissolved Oxygen - Field	mg/L	≥8	-	12.16	***7.13***	12.60	***6.35***

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 discharging, therefore the turbidity and TSS WQGs were evaluated. Background values used to evaluate the March 25 IDZ-W1 and IDZ-W2 samples are the maximum values measured in the March 12 and 13 WQR2 and WQR1 reference station samples, respectively, at 0.5 and 2 m below the surface and 2 m above the seafloor (Report #56 and #55, respectively).

Table F-6: Marine Water Dioxin and Furan Toxicity Equivalency Quantity (TEQ) Results Received at the Time of Reporting.

Parameter					**Lower Bound PCDD/F TEQ**	**Upper Bound PCDD/F TEQ**
Unit					**pg/L**	**pg/L**
Station	**Water Type**	**Sample ID**	**Lab ID**	**Sampling Date**		
Station IDZ-W1						
IDZ-W1	0.5 m Below Surface	IDZ-W1-0.5	L2759010-1	2025-02-18	0.0119	1.37
IDZ-W1	2 m Below Surface	IDZ-W1-2m	L2759010-2	2025-02-18	0.0387	1.43
IDZ-W1	2 m Above Seafloor	IDZ-W1-SF	L2759010-3	2025-02-18	0	1.44
IDZ-W1	0.5 m Below Surface	IDZ-W1-0.5	L2759209-1	2025-03-12	0.0216	0.525
IDZ-W1	2 m Below Surface	IDZ-W1-2m	L2759209-2	2025-03-12	0.00876	0.482
IDZ-W1	2 m Above Seafloor	IDZ-W1-SF	L2759209-3	2025-03-12	0.0156	0.458
Station IDZ-W2						
IDZ-W2	0.5 m Below Surface	IDZ-W2-0.5	L2759010-4	2025-02-18	0.0294	1.40
IDZ-W2	2 m Below Surface	IDZ-W2-2m	L2759010-5	2025-02-18	0.0254	1.37
IDZ-W2	2 m Above Seafloor	IDZ-W2-SF	L2759010-6	2025-02-18	0	1.54
IDZ-W2	0.5 m Below Surface	IDZ-W2-0.5	L2759209-4	2025-03-12	0.00927	0.452
IDZ-W2	2 m Below Surface	IDZ-W2-2m	L2759209-5	2025-03-12	0.00845	0.543
IDZ-W2	2 m Above Seafloor	IDZ-W2-SF	L2759209-6	2025-03-12	0.0139	0.573
Reference Station WQR2						
WQR2	0.5 m Below Surface	WQR2-0.5	L2759010-7	2025-02-18	0	1.12
WQR2	2 m Below Surface	WQR2-2m	L2759010-8	2025-02-18	0	1.18
WQR2	2 m Above Seafloor	WQR2-SF	L2759010-9	2025-02-18	0.00107	1.35
WQR2	0.5 m Below Surface	WQR2-0.5	L2759209-7	2025-03-12	0.00950	0.527
WQR2	2 m Below Surface	WQR2-2m	L2759209-8	2025-03-12	0.00504	0.571
WQR2	2 m Above Seafloor	WQR2-SF	L2759209-9	2025-03-12	0.0139	0.499

Notes:
PCDD = polychlorinated dibenzodioxins (dioxins)
PCDF = polychlorinated dibenzofurans (furans)
TEQ = toxic equivalency
Lower bound PCDD/F TEQ is the sum of the toxic equivalency results for the individual PCDD/F parameters. Non-detectable parameters are assigned a value of zero (0).
Upper bound PCDD/F TEQ is the sum of the toxic equivalency results for the individual PCDD/F parameters. Non-detectable parameters are assigned the value of the detection limit.