TECHNICAL MEMORANDUM

To:	**Ian McAllister, Ashleigh Crompton, Mike Champion, Mark Zan and Ryan Schucroft (Woodfibre LNG)**	**Date:**	**24 Oct 2025**
From:	**Holly Pelletier, Cheng Kuang and Patrick Mueller (Lorax)**	**Project #:**	**A633-9**
Subject:	**PE-111578 Weekly Discharge and Compliance Report #83 for September 21 – 27 (Version S1)**		

Version S1 of this report (Report #83) replaces version S, issued on October 3, 2025. Refer to Table 4 for a description of the revisions.

Waste Discharge Authorization (WDA) Effluent Permit PE-111578 was issued by the British Columbia Energy Regulator (BCER) to Woodfibre LNG on February 9, 2024. The associated WDA discharge and compliance monitoring program is conducted by on-site Environmental Monitors (Roe Environmental) that are sub-contracted to the civil works contractor (LB LNG). Analytical samples are submitted by Roe Environmental to ALS Environmental in Burnaby, BC, for testing. Lorax Environmental Services Ltd. (Lorax) provides water quality database management and WDA compliance reporting services to Woodfibre LNG.

This technical memorandum (Report #83) was prepared by Lorax and summarizes WDA monitoring conducted for the period of September 21 – 27. Monitoring data and pending results from prior monitoring periods available at the time of reporting are tabulated and included as appendices to this memorandum. Report #83 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. Shoring works along the foreshore areas were initiated in December 2023, and construction of water management infrastructure commenced in early 2024. Land-based construction occurs within two water management areas east and west of Mill Creek, referred to as the east and west catchments, respectively. Non-contact water is intercepted and diverted around the construction areas to Howe Sound and Mill Creek. Stormwater runoff collected within the east and west catchment areas (7.12 and 5.92 ha, respectively) is managed as site contact water and is conveyed to the East Wastewater Treatment Plant (WWTP) for treatment, or to the East and West Sedimentation Ponds for settling of suspended particulate. Intermittent discharge to Howe Sound from the East and West Sedimentation Ponds commenced April and October 2024, respectively.

Non-contact water from the slopes above and outside the Woodfibre LNG construction area is intercepted by diversion ditches and conveyed to Howe Sound or Mill Creek. Diversion ditches for the west catchment convey water to Mill Creek at station OUT-06, or to Howe Sound at station OUT-02 (Appendix A, Figure 1). During heavy precipitation, non-contact water is also conveyed to Howe Sound via station OUT-01. East of Mill Creek, non-contact water is intercepted and diverted around the east catchment along pre-existing road ditches that flow to East Creek or Mill Creek. To facilitate the replacement of the East Creek discharge culvert at OUT-12 (station SW-04), the lower reach of East Creek was temporarily diverted to an adjacent culvert, OUT-11, on September 17, 2024.

The East WWTP was commissioned April 2024 and the West WWTP was commissioned August 2024. Operation of the West WWTP was subsequently suspended September 25, 2024 for a temporary reconfiguration to conduct pilot-scale evaluations of alternative treatment processes. The evaluations were completed April 2025 and did not yield improved treatment outcomes; therefore, the original treatment process has been maintained. Lower than expected volumes of contaminated contact water have been encountered during construction; therefore, operation of the West WWTP remains suspended and all site waters that require treatment are directed to the East WWTP, with treated effluent discharged to the East Sedimentation Pond.

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

Discharge from the East and West Sedimentation Ponds is controlled using pumps. Prior to water management upgrades that commenced implementation during the week of June 22 - 28, 2025, water stored in the ponds was pumped to a TSS settling system for clarification and then discharged through the authorized outfall structures associated with each pond. Some of the TSS-clarified water was recirculated back to the ponds or was re-used for construction (*e.g.*, dust suppression), and this will continue with the revised configuration. Each sedimentation pond has an associated authorized discharge location (stations SP-E-OUT and SP-W-OUT) with an initial dilution zone (IDZ) where discharged water mixes with Howe Sound surface waters. The IDZ is defined in PE-111578 and extends in a 150 m radius from each point of discharge into Howe Sound.

A flocculant-based TSS settling system (2700GPM) is being implemented at the West Sedimentation Pond to clarify all non-contaminated construction contact water prior to re-use at site or discharge at SP-W-OUT. The fully built 2700GPM TSS settling system will have the installed capacity to clarify 14,700 m^3/day of contact water and will consist of six parallel treatment trains, each with an installed capacity of 2450 m^3/day. Only one train will be operated during dry conditions or when contact water flows are below approximately 2450 m^3/day, whereas at higher flows, additional trains will be activated as needed to match the influent volumes. The individual treatment trains are being commissioned in stages. Train 1, Train 2, Train 3 and Train 4 have been commissioned, and preparations are underway to commission the remaining two treatment trains.

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

1.2 Weather and Water Management

Variable weather conditions were observed during the September 21 – 27 monitoring period, with precipitation recorded on September 21 (18.6 mm), September 26 (3.4 mm) and September 27 (28.2 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
2025-09-21	18.6	22.8	12.7	Rain
2025-09-22	0	20.4	10.8	Overcast
2025-09-23	0	23.9	13.4	Mix of sun and cloud
2025-09-24	0	20.9	12.4	Mix of sun and cloud
2025-09-25	0	16.7	10.5	Mix of sun and cloud
2025-09-26	3.4	17.2	10.6	Rain
2025-09-27	28.2	15.1	12.4	Rain

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

From September 21 – 27, the East Sedimentation Pond received water from the 1100 Sump, Trench 7 and recirculated effluent from the East WWTP (Appendix A, Figure 2). Some water from the construction water supply system was directed to the pond to facilitate operation of the concrete contact water circuit. There was no discharge to Howe Sound from station SP-E-OUT during the monitoring period. Water from the East Sedimentation Pond was not transferred to the West Sedimentation Pond from September 21 – 27 (Appendix B, Table B-4).

Routine operation of the East WWTP continued during the monitoring period (September 21 – 27). Concrete contact water and contaminated baker tank water was periodically directed to the East WWTP for treatment, as well as water stored in the East Sedimentation Pond (Appendix A, Figure 2 and Figure 3). East WWTP treated effluent was discharged to the East Sedimentation Pond each day during the monitoring period (September 21 – 27) except on September 23 when the East WWTP was not operated. Daily water volumes processed by the East WWTP are provided in Appendix B (Table B-4).

From September 21 – 27, the West Sedimentation Pond received recirculated effluent from the 2700GPM TSS settling system and water from the west catchment sumps (Appendix A, Figure 3). Implementation of the 2700GPM TSS settling system continued with installation of components for Train 5 and Train 6. West Sedimentation Pond effluent was clarified through the system each day during the monitoring period (September 21 – 27) and recirculated back to the pond. A total of 1,258 m^3 of clarified effluent was intermittently discharged to Howe Sound from station SP-W-OUT on September 26 (7:20 PM to 11:59 PM) and September 27 (12:00 AM to 12:35 AM and 12:36 PM to 2:16 PM). A total of 29 m^3 of clarified effluent was reclaimed for construction use from September 21 – 27. Daily clarified effluent volumes from the TSS settling system that were recirculated or discharged to Howe Sound, and volumes of water reclaimed for construction use are provided in Appendix C (Table C-4).

2. Monitoring Summary

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

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

- Non-contact diversion ditch outlet monitoring stations (OUT-01, OUT-02 andOUT-06). East Creek water has been temporarily diverted to OUT-11 since September 17, 2024, and is monitored at the inlet to temporary diversion (station SW-04), therefore OUT-11 is not currently monitored.
- Creek water monitoring stations for Woodfibre, Mill and East Creek (SW-01, SW-02, SW-03, SW-04, SW-07).

- Contact water monitoring locations (SP-E-IN, WWTP-E-IN, WWTP-E-OUT, SP-W-IN, 2700GPM-IN, and 2700GPM-OUT).
- Supplementary contact water stations at the outlet of each sampling train. These samples are identified as W2700T#-OUT (with # equal to the train number).
- Effluent compliance stations (SP-E-OUT and SP-W-OUT). As described in Section 1.1, when there is surplus water, West Sedimentation Pond clarified effluent from the individual 2700GPM trains is directed to SP-W-OUT for discharge. As of September 26, a manifold is being implemented the combines effluent from the individual trains into a single discharge line configured with a new SP-W-OUT sampling port. Prior to September 26, the SP-W-OUT monitoring station was not safe to access and the SP-W-OUT station was monitored at the outlet of the individual 2700GPM TSS settling trains.
- Howe Sound reference and IDZ monitoring stations (WQR1, WQR2, IDZ-E1, IDZ-E2, IDZ-W1, and IDZ-W2).

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

A flocculant-based TSS settling system (2700GPM) is used at the West Sedimentation Pond as described in Section 1.1. Influent and effluent are monitored at stations 2700GPM-IN and 2700GPM-OUT, respectively. The 2700GPM-OUT station represents the combined discharge from all six individual treatment trains and is at the same location as the SP-W-OUT station. At times when only one 2700GPM treatment train is operated the 2700GPM-OUT sample has been collected at the outlet of that train. Monitoring of the individual 2700GPM settling system treatment trains is supplemental to the PE-111578 monitoring requirements and is conducted at the discretion of field staff. As previously discussed, since September 26, a manifold is being implemented the combines effluent from the individual trains into a single discharge line configured with a new SP- W- OUT sampling port. Prior to September 26, The SP-W-OUT monitoring station was not safe to access, and the SP-W-OUT station was monitored at the outlet of the individual 2700GPM TSS settling trains at the frequency specified in PE-111578.

Water quality was monitored at stations SP-E-IN, WWTP-E-IN, WWTP-E-OUT, SP-W-IN, 2700GPM-IN, and 2700GPM-OUT (at the outlet of Train 1, Train 2 and Train 3, or at the combined stream sampling port) during the monitoring period (September 21 – 27). Sampling dates and parameters tested are summarized in Table 2.

Overall, the PE-111578 monitoring requirements that were applicable during the monitoring period (September 21 – 27) were met. The initial high frequency monitoring requirements outlined in effluent permit PE-111578 for the sedimentation ponds, WWTP and IDZ stations have been met. On June 25, 2025, BCER approved the implementation of low-frequency (*i.e.*, bi-monthly

and monthly) monitoring requirements specified in PE-111578 for all parameters, except for metals, hexavalent chromium, and methylmercury, which continue to be monitored weekly at sedimentation pond and WWTP stations.

Daily field parameters and a weekly analytical sample were not collected at the east catchment effluent compliance station (SP-E-OUT) as there was no discharge to Howe Sound from the East Sedimentation Pond during the monitoring period (September 21 – 27). Daily field parameters were not collected at the west catchment effluent compliance station (SP-W-OUT) from September 21 - 25 as there was no discharge to Howe Sound on those days.

Daily field parameters were not collected at the influent and effluent stations of the East WWTP (WWTP-E-IN and WWTP-E-OUT, respectively) on September 24, 25 and 26 as it was not operational at the time of monitoring. Daily field parameters and a weekly analytical sample were not collected at the influent and effluent stations of the West WWTP (WWTP-W-IN and WWTP-W-OUT, respectively) as it was not operational September 21 – 27.

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

Sampling Date	Sample	Description	Parameters Tested	Monitoring Frequency
September 21, 2025	SP-E-IN	East Sedimentation Pond influent monitored at cell 1 of the pond	Field Parameters.	D
	WWTP-E-IN	East WWTP at the influent meter box	Field Parameters.	D
	WWTP-E-OUT	East WWTP at the effluent meter box		
	SP-W-IN	West Sedimentation Pond influent monitored at cell 1 of the pond	Field Parameters.	D
	2700GPM-IN	2700GPM TSS settling system at the influent meter box	Field Parameters.	D
	2700GPM-OUT	2700GPM TSS settling system at the combined effluent meter box Train 2 and Train 3		
September 22, 2025	SP-E-IN	East Sedimentation Pond influent monitored at cell 1 of the pond	Field Parameters.	D
	WWTP-E-IN	East WWTP at the influent meter box	Field Parameters.	D
	WWTP-E-OUT	East WWTP at the effluent meter box		
	SP-W-IN	West Sedimentation Pond influent monitored at cell 1 of the pond	Field Parameters.	D
	2700GPM-IN	2700GPM TSS settling system at the influent meter box	Field Parameters.	P
	2700GPM-OUT	2700GPM TSS settling system at the effluent meter box of Train 3		
September 23, 2025	SP-E-IN	East Sedimentation Pond influent monitored at cell 1 of the pond	Field Parameters.	D
	WWTP-E-IN	East WWTP at the influent meter box	Field Parameters.	D
	WWTP-E-OUT	East WWTP at the effluent meter box		
	SP-W-IN	West Sedimentation Pond influent monitored at cell 1 of the pond	Field Parameters.	D
	2700GPM-IN	2700GPM TSS settling system at the influent meter box	Field Parameters.	P
	2700GPM-OUT	2700GPM TSS settling system at the effluent meter box of Train 3		
September 24, 2025	SP-E-IN	East Sedimentation Pond influent monitored at cell 1 of the pond	Field Parameters.	D
	SP-W-IN	West Sedimentation Pond influent monitored at cell 1 of the pond	Field Parameters.	D
	2700GPM-IN	2700GPM TSS settling system at the influent meter box	Field Parameters.	P
	2700GPM-OUT	2700GPM TSS settling system at the combined effluent meter box of Train 1 and Train 2	Field & Physical Parameters, Total, and Dissolved Metals.	P
September 25, 2025	SP-E-IN	East Sedimentation Pond influent monitored at cell 1 of the pond	Field Parameters.	D
	SP-W-IN	West Sedimentation Pond influent monitored at cell 1 of the pond	Field Parameters.	D
	2700GPM-IN	2700GPM TSS settling system at the influent meter box	Field Parameters.	P
	2700GPM-OUT	2700GPM TSS settling system at the effluent meter box of Train 2	Field & Physical Parameters, Total, and Dissolved Metals.	P
September 26, 2025	SP-E-IN	East Sedimentation Pond influent monitored at cell 1 of the pond	Field Parameters.	D
	SP-W-IN	West Sedimentation Pond influent monitored at cell 1 of the pond	Field Parameters.	D
	2700GPM-IN	2700GPM TSS settling system at the influent meter box	Field Parameters.	P
	2700GPM-OUT (SP-W-OUT)	2700GPM TSS settling system at the combined effluent meter box of Train 1 and 2	Field Parameters.	D
September 27, 2025	SP-E-IN	East Sedimentation Pond influent monitored at cell 1 of the pond	Field, Physical & General Parameters, VH & BTEX, EPHs & PAHs, Total, Dissolved and Speciated Metals, VOCs, Methylmercury, Dioxins & Furans.	D, M, M_2, W
	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, M, M_2, W
	WWTP-E-OUT	East WWTP at the effluent meter box		
	SP-W-IN	West Sedimentation Pond influent monitored at cell 1 of the pond	Field, Physical & General Parameters, Total, Dissolved and Speciated Metals, and Methylmercury.	D, M_2, W
	2700GPM-IN	2700GPM TSS settling system at the influent meter box	Field, Physical & General Parameters, VH & BTEX, EPHs & PAHs, Total, Dissolved and Speciated Metals, VOCs, Methylmercury, Dioxins & Furans.	P
	2700GPM-OUT (SP-W-OUT)	2700GPM TSS settling system at the combined effluent meter box of Train 1 and Train 2	Field, Physical & General Parameters, VH & BTEX, EPHs & PAHs, Total, Dissolved and Speciated Metals, VOCs, Methylmercury, Dioxins & Furans.	D, M, M_2, W

Notes: Monitoring frequency requirements under PE-111578 are indicated as follows:
D – daily monitoring of field parameters at WWTP and sedimentation pond influent and effluent stations.
M – monthly monitoring for all parameters at WWTP, sedimentation pond and receiving environment stations. Monthly monitoring for General parameters, except ammonia, nitrate and nitrite (*i.e.*, nitrogen species) are monitored weekly during blasting season.
M_2 – bi-monthly monitoring for physical parameters at WWTP and sedimentation pond stations.
W – high frequency monitoring for metals, chromium speciation and methylmercury at WWTP and sedimentation pond influent and effluent stations, effective June 25, 2025.
P – periodic monitoring for targeted parameters that is supplementary to PE-111578 requirements.

3. Water Quality Results

3.1 Screening and Reporting Overview

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

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

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

The BC WQG for total mercury is a sample-specific calculated value that is based on the concentration of methylmercury in a sample. Although an approved BC WQG for the protection of aquatic life for methylmercury has not been explicitly established, the BC Ambient Water

Quality Guidelines for Mercury Overview Report indicates the total mercury WQG is derived from a methylmercury concentration threshold of 0.0001 µg/L (0.1 ng/L) that is set at a concentration that protects fish from mercury bioaccumulation to levels that could harm wildlife that consumes fish. Therefore, if methylmercury results are reported, the 0.0001 µg/L value is presented as a WQG to support the interpretation of methylmercury results.

A summary of reported and pending results is provided in Section 3.2. Results for effluents from East WWTP, 2700GPM TSS settling system, and East and West Sedimentation Ponds are discussed in Section 3.3 and Section 3.4. The water quality monitored at non-contact water diversion ditch outlets and in the receiving environment is described in Section 3.5, Section 3.6 and Section 3.7. Sediment samples are collected annually at stations IDZ-E-SED and IDZ-W-SED, and the sediment results are discussed in Section 3.7 when they are reported.

3.2 Summary of Reported Results

Analytical results and associated field measurements included in this weekly report (Report #83) are listed below in Table 3, with additional field measurements presented in Table B-2 (Appendix B) and Table C-5 (Appendix C). Testing for methylmercury, dioxins, furans and toxicity may require four weeks or longer to complete. Analytical results not reported will be included in future weekly reports. Reporting of results is pending for the following samples and parameters:

- SW-01 and SW-04 collected September 7 (methylmercury);
- SP-W-IN, 2700GPM-IN and 2700GPM-OUT collected September 14 (dioxins and furans);
- 2700GPM-OUT (SP-W-OUT) collected September 15 (dioxins and furans);
- SP-E-IN, WWTP-E-IN and WWTP-E-OUT collected September 20 (hexavalent chromium and methylmercury);
- SP-E-IN, WWTP-E-IN and WWTP-E-OUT collected September 27 (all analytical parameters);
- SP-W-IN, 2700GPM-IN and 2700GPM-OUT (SP-W-OUT) collected September 27 (all analytical parameters).

Table 3:
Summary of Analytical Results and Associated Field Measurements Included in Weekly Discharge and Compliance Report #83.

Sample	Description	Sampling Date	Parameters Reported
SW-02	Lower Reach of Mill Creek (upstream of the third bridge)	September 6, 2025	Dioxins and Furans.
SW-03	Mill Creek Estuary		
SW-07	Upstream Mill Creek (at the diversion inlet)		
SW-01	Lower Reach of Woodfibre Creek (near the mouth)	September 7, 2025	Dioxins and Furans.
SW-04	Lower Reach of East Creek (near the outlet to the outfall culvert)		
2700GPM-IN	2700 GPM TSS settling system at the influent meter box	September 8, 2025	Dioxins and Furans.
2700GPM-OUT	2700 GPM TSS settling system at the effluent meter box		
IDZ-E1-0.5	Howe Sound IDZ station E1; 0.5 m below surface	September 12, 2025	Field, Physical and General Parameters, Total and Dissolved Metals, Hexavalent Chromium, PAHs, VOCs, Methylmercury, Dioxins and Furans.
IDZ-E1-2m	Howe Sound IDZ station E1; 2 m below surface		
IDZ-E1-SF	Howe Sound IDZ station E1; 2 m above the seafloor		
IDZ-E2-0.5	Howe Sound IDZ station E2; 0.5 m below surface		
IDZ-E2-2m	Howe Sound IDZ station E2; 2 m below surface		
IDZ-E2-SF	Howe Sound IDZ station E2; 2 m above the seafloor		
WQR1-0.5	Reference site 1; 0.5 m below surface	September 13, 2025	Field, Physical and General Parameters, Total and Dissolved Metals, Hexavalent Chromium, PAHs, VOCs, Methylmercury, Dioxins and Furans.
WQR1-2m	Reference site 1; 2 m below surface		
WQR1-SF	Reference site 1; 2 m above the seafloor		
IDZ-W1-0.5	Howe Sound IDZ station E1; 0.5 m below surface	September 15, 2025	Field, Physical and General Parameters, Total and Dissolved Metals, Hexavalent Chromium, PAHs, VOCs, Methylmercury, Dioxins and Furans.
IDZ-W1-2m	Howe Sound IDZ station E1; 2 m below surface		
IDZ-W1-SF	Howe Sound IDZ station E1; 2 m above the seafloor		
IDZ-W2-0.5	Howe Sound IDZ station E2; 0.5 m below surface		
IDZ-W2-2m	Howe Sound IDZ station E2; 2 m below surface		
IDZ-W2-SF	Howe Sound IDZ station E2; 2 m above the seafloor		
WQR2-0.5	Reference site 2; 0.5 m below surface		
WQR2-2m	Reference site 2; 2 m below surface		
WQR2-SF	Reference site 2; 2 m above the seafloor		
SP-E-IN	East Sedimentation Pond influent monitored at cell 1 of the pond	September 20, 2025	Field, Physical and General Parameters, Total and Dissolved Metals, Hexavalent Chromium, Methylmercury
WWTP-E-IN	East WWTP at the influent meter box		
WWTP-E-OUT	East WWTP at the effluent meter box		
2700GPM-OUT	2700 GPM TSS settling system at the combined effluent meter box of Train 1 and Train 2	September 24, 2025	Field and Physical Parameters, Total and Dissolved Metals.
2700GPM-OUT	2700 GPM TSS settling system at the combined effluent meter box – Train 1 only	September 25, 2025	Field and Physical Parameters, Total and Dissolved Metals.

3.3 East Catchment

The east catchment water quality monitoring results for stations at the East WWTP, East Sedimentation Pond, and the authorized discharge location (SP-E-OUT) 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 CCME, ECCC and BC WQGs for the protection of marine water aquatic life. East WWTP monitoring results for parameters without discharge limits are screened against operational MDOs, which are equivalent to the PE-111578 discharge limits and the lowest of the CCME, ECCC and BC WQGs for the protection of marine water aquatic life.

Samples collected from sedimentation pond effluent that is discharged to Howe Sound (monitored at station SP-E-OUT) are evaluated for non-compliance to PE-111578 discharge limits. Exceedances in contact water that remains on-site and is not discharged (e.g., WWTP influent and effluent, and sedimentation pond influent) are highlighted for comparison purposes only, and do not represent non-compliance to the PE-111578 conditions.

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. East catchment monitoring results included in this weekly report and exceedances of screening values in effluents from the East WWTP and East Sedimentation Pond are summarized below.

Daily effluent volumes for the East WWTP and from SP-E-OUT are listed in Appendix B, Table B-4. There were no discharges to Howe Sound from the SP-E-OUT authorized discharge location during the monitoring period (September 21 – 27), therefore water quality samples and field measurements were not collected at this station.

Field measurements were collected September 21 – 27 for East WWTP influent and effluent and East Sedimentation Pond influent, as outlined in Section 2, and are tabulated in Appendix B, Table B-1 and Table B-2, respectively. Analytical samples collected at stations SP-E-IN, WWTP-E-IN, and WWTP-E-OUT on September 20 (as discussed in Report #82) were available at the time of reporting.

Dissolved oxygen (6.03 - 7.09 mg/L) was below the lower limit of the MDO (≥8 mg/L) in East WWTP effluent (WWTP-E-OUT) collected during the monitoring period (September 21 – 27) on September 21 and 27 (Appendix B, Table B-3). The depletion of dissolved oxygen was also observed in contact water during dry conditions in 2024 and is speculated to be induced by warm temperatures and limited freshwater inputs (*i.e.,* from rain) to the contact water management system during dry conditions. East WWTP treated effluent was directed to the East Sedimentation Pond and there was no discharge to Howe Sound from the authorized discharge location (SP-E-OUT) during the September 21 – 27 monitoring period.

Total copper (0.0169 mg/L), total lead (0.00429 mg/L) and total zinc (0.0156 mg/L) concentrations were above the MDOs (0.0043, 0.0035 and 0.0133 mg/L, respectively) in East WWTP effluent collected September 20 (Appendix B, Table B-1). Metal parameters above MDOs are tracked in Table 4.

3.4 West Catchment

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

Samples collected from sedimentation pond effluent that is discharged to Howe Sound (monitored at station SP-W-OUT) are evaluated for non-compliance to PE-111578 discharge limits. Exceedances in contact water that remains on-site and is not discharged (e.g., sedimentation pond influent, TSS settling system influent, and TSS settling system effluent that is recirculated) are highlighted for comparison purposes only, and do not represent non-compliance to the PE-111578 conditions.

The screened water quality results for analytical samples and field parameters are presented in Appendix C. West catchment monitoring results included in this weekly report and exceedances of screening values in effluents from the 2700GPM TSS settling system and West Sedimentation Pond are summarized below. As described in Section 2, a new monitoring station for SP-W-OUT is being established and monitoring of effluent discharge to Howe Sound was conducted at station 2700GPM-OUT as a proxy for the SP-W-OUT monitoring station.

During the monitoring period (September 21 – 27), implementation of the 2700GPM TSS settling system continued (Section 1.1 and Section 1.2). West Sedimentation Pond water was directed to the 2700GPM TSS settling system each day and clarified effluent was recirculated to the pond or discharged to Howe Sound (refer to Section 1.2). A total of 1,258 m^3 of clarified effluent from the 2700GPM TSS Settling System was intermittently discharged to Howe Sound from the west catchment discharge location (SP-W-OUT) on September 26 and 27. Daily clarified effluent discharge volumes from SP-W-OUT are summarized in Appendix C, Table C-4.

Field measurements of influent and effluent quality for the West Sedimentation Pond and the 2700GPM TSS settling system were collected September 21 – 27, as outlined in Section 2, and are tabulated in Appendix C, Table C-3. Analytical samples collected September 24 and September 25 (station 2700GPM-OUT) were available at the time of reporting. The 2700GPM-OUT samples

were collected at the outlet of the combined effluent from Train 1 and Train 2 on September 24 and 25, as noted in Section 2. Screening results for west catchment contact water quality are tabulated in Table C-1 of Appendix C.

During the monitoring period (September 21 – 27), field measurements collected at station 2700GPM-OUT met PE-111578 discharge limits and WQGs except for dissolved oxygen (6.82 mg/L), which was below the lower limit of the WQG (≥8 mg/L) on September 24. The depletion of dissolved oxygen was also observed in contact water during dry conditions in 2024 and is speculated to be induced by warm temperatures and limited freshwater inputs (*i.e.*, from rain) to the contact water management system during dry conditions. Clarified effluent from the 2700GPM system was recirculated to the West Sedimentation Pond on September 24.

The analytical results from the 2700GPM-OUT samples collected September 24 and 25 are tabulated in Appendix C, Table C-1 and met PE-111578 discharge limits and WQGs. Clarified effluent from the 2700GPM system was recirculated to the West Sedimentation Pond on September 24 and 25.

Dioxin and furan results were reported for 2700GPM TSS settling system influent and effluent samples (2700GPM-IN and 2700GPM-OUT, respectively) collected September 8 (as discussed in Report #81). The lower and upper bound PCDD/F TEQ concentrations in the 2700GPM-OUT sample were 0 and 0.947 pg/L, respectively. Results are tabulated in Appendix C, Table C-2.

3.5 Non-Contact Water Diversion Ditch Outlets

Non-contact water diversion ditch samples are screened against CCME, ECCC and BC WQGs for the protection of freshwater aquatic life; however, there were no analytical results for non-contact diversion ditch outlet stations at the time of reporting.

3.6 Freshwater and Estuarine Water Receiving Environment

Freshwater and estuarine water receiving environment samples are screened against CCME, ECCC 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 water).

Dioxins and furans results were available at the time of reporting for freshwater and estuarine water samples collected at Mill Creek estuary, mid-stream and background stations (SW-03, SW-02 and SW-07, respectively) on September 6 (as discussed in Report #80), as well as near the mouth of Woodfibre Creek and East Creek (stations SW-01 and SW-04, respectively) on September 7 (as discussed in Report #81). The lower and upper bound PCDD/F TEQ

concentrations measured in these samples ranged from 0 to 0.0107 pg/L and from 0.841 to 1.24 pg/L, respectively. The lower and upper bound PCDD/F TEQ concentrations were within the concentration ranges observed in the baseline monitoring program. Results are tabulated in Appendix D, Table D-1 and Appendix E, Table E-1.

3.7 Marine Water Receiving Environment

Marine water receiving environment samples are screened against CCME, ECCC 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 are 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 on September 12 (stations IDZ-E1 and IDZ-E2) and September 13 (station WQR1) (as discussed in Report #81), and September 15 (stations IDZ-W1, IDZ-W2 and WQR2) (as discussed in Report #82).

Parameter concentrations met WQGs except dissolved oxygen, total boron and total copper in some samples (Appendix F; Tables F-1 through Table F-3).

In samples collected at 2 m above the seafloor on September 12 (stations IDZ-E1 and IDZ-E2), September 13 (station WQR1) and September 15 (stations IDZ-W1 and IDZ-W2), dissolved oxygen ranged from 5.30 to 7.89 mg/L and was below the lower limit of the WQG (8 mg/L). Total boron was also above the WQG (1.2 mg/L) and ranged from 1.24 to 3.82 mg/L in samples collected at 2 m above the seafloor at all stations on September 12 and 13 and at stations IDZ-W2 and WQR2 on September 15 as well as in the sample collected at 2 m below the surface at WQR1 on September 13. Low concentrations of dissolved oxygen and elevated concentrations of total boron are indicative of influence from the deeper saline waters in the northern basin of Howe Sound and are a natural condition of marine water at the WDA monitoring stations. The dissolved oxygen and total boron concentrations observed at the IDZ monitoring stations are within concentrations that have been observed in the pre-construction baseline monitoring program or within background ranges observed at marine reference stations.

Total copper was above the long-term WQG (0.002 mg/L) in the September 12 samples collected at IDZ-E1 and IDZ-E2 at 0.5 m below the surface (0.00244 and 0.00282 mg/L, respectively) and was above the long- and short-term WQGs (0.002 and 0.003 mg/L, respectively) at IDZ-E2 at 2 m below the surface (0.00402 mg/L) on September 12. The total copper 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.

Methylmercury analytical results were available at the time of reporting for all marine samples collected September 12 (stations IDZ-E1 and IDZ-E2), September 13 (station WQR1) and September 15 (stations IDZ-W1, IDZ-W2 and WQR2). For all samples, methylmercury concentrations ranged from <0.000020 to 0.000038 µg/L and met the WQG. The corresponding total mercury results also met WQGs. Results are tabulated in Appendix F, Table F-4.

Dioxin and furans results were available at the time of reporting for all marine samples collected September 12 (stations IDZ-E1 and IDZ-E2), September 13 (station WQR1) and September 15 (stations IDZ-W1, IDZ-W2 and WQR2). For all samples, the lower bound PCDD/F TEQ concentrations ranged from 0 to 0.0083 pg/L and the upper bound PCDD/F TEQ concentrations ranged from 0.904 to 1.34 pg/L. 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-5.

3.8 Quality Control

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

Table 4:
Weekly Report QC Evaluations and Ongoing Items

QC Procedure	Observation	Investigation/Resolution
Reporting Period (September 21 – 27, Report #83)		
Report #83: Revision to Version S1	Anions and hexavalent chromium results revised by the laboratory.	A review conducted by the laboratory for the September 12 and 13 IDZ-E1, IDZ-E2 and WQR1 samples with raised detection limits (<0.00500 and <0.0100 mg/L) determined detection limits were not achieved for these samples due to a lab error. Additionally, a laboratory review for the anions results (sulfate, nitrate, nitrite, chloride, fluoride) for all marine water receiving environment samples collected September 15 (IDZ-W1, IDZ-W2 and WQR2) determined the originally reported values were incorrect due to a lab error. Report #83 has been reissued as version S1 (*i.e.*, this report), and Tables F-1, F-2 and F-3 of this report have been updated to show the revised results. This item is closed.
Authorized Works and Monitoring Program Evaluation	The authorized works and monitoring stations have not been established as described in PE-111578.	The PE-111578 authorized works for water management have been constructed, except for some of the conveyance ditches, which require completion of site grading prior to installation. Sumps, pumps and hoses are used for temporary conveyance until the ditches are completed. The lower reach of East Creek has been temporarily diverted through the OUT-11 outfall since September 17, 2024, to facilitate replacement of the East Creek outfall culvert (OUT-12). All monitoring stations have been established except at SP-E-IN-1, SP-E-IN-2, SP-W-IN-1 and SP-W-IN-2 where substitute stations are established in lieu of those listed in PE-111578 (refer to Section 2). Since July the SP-W-OUT monitoring station has not been safe to access, and West Sedimentation Pond effluent was monitored at the outlet of the individual 2700GPM TSS settling train that was operating at the time of monitoring. As of September 26, a new SP-W-OUT monitoring station is being implemented to monitor the combined pond effluent in situations when multiple TSS settling trains are operating concurrently. This item remains open.
Report #83: WWTP Performance Evaluation	Total lead and total zinc above the MDO.	The total lead and total zinc concentrations were 0.00429 and 0.0156 mg/L, respectively, in samples collected at WWTP-E-OUT on September 20 and were above the MDOs (0.0035 and 0.0133 mg/L, respectively). The WWTP treatment performance for total lead and zinc will be reviewed. This item remains open.
Report #83: Pending Data	Analytical results not reported.	Analytical results for contact water and treated water samples collected September 27 were not included with Report #83. The pending results will be included in future weekly reports when available. This item remains open.
Report #83: Data QC	Fluoride above the WQG and baseline ranges.	Fluoride was 2.4 mg/L, above the short-term WQG of 1.5 mg/L, in the sample collected at IDZ-W2 at 2 m above the seafloor on September 15. The fluoride concentration is above the upper range of concentrations observed in the pre-construction baseline monitoring program and above background ranges observed at marine reference stations. The fluoride concentration is suspected to be erroneous and is being verified by the laboratory. This item remains open.
Report #83: Data QC	Poor correlation with field turbidity and TSS.	Field turbidity (0.96 NTU) in the September 15 IDZ-W1 (2 m above seafloor) sample shows poor correlation with the measured TSS value (10.7 mg/L) and with lab turbidity (5.89 NTU, not included in the WDA weekly report, used for field turbidity QC evaluation). The TSS concentration and the lab turbidity value are being verified by the laboratory. This item remains open.
Report #83: Data QC	Raised detection limits for hexavalent chromium above WQG.	Raised detection limits (<0.00500 and <0.0100 mg/L) were reported by the laboratory for samples collected September 12 (IDZ-E1 and IDZ-E2, at 2 m above the seafloor) and September 13 (WQ1 at 2 m below surface and 2 m above the seafloor) due to sample matrix effects. The raised detection limits reported for hexavalent chromium were above the long-term WQG (0.0015 mg/L). However, hexavalent chromium is a component of the total chromium parameter. The total chromium concentration for these samples is <0.0005 mg/L, therefore the hexavalent chromium WQG is met in these samples. Nonetheless, reanalysis will be requested from the laboratory to determine why detection limits were not achieved for these samples. This item remains open.
Ongoing Items from Previous Weekly Reports		
Report #62: WWTP Performance Evaluation	Total copper above the MDO.	The treatment effectiveness for T-Cu has been inconsistent from January to October. Several modifications to the treatment process have been implemented in 2025 to improve T-Cu removal. The HSMT metal removal media was replaced on June 5. A modification to how the treatment reagents are added was implemented late July. BCER has been notified that additional filtration will be implemented to remove fine particles at the outlet of the treatment plant. High-frequency monitoring at multiple treatment stages is on-going to the evaluate the effectiveness of these changes. Total copper concentrations in WWTP-E-OUT samples collected August 8, 14, 20 met the MDO (0.0043 mg/L). Samples collected on August 26 (0.00448 mg/L), September 5 (0.0117 mg/L), September 10 (0.0100 mg/L), and September 20 (0.0169 mg/L) were above the MDO. The WWTP treatment performance for total copper continues to be reviewed. This item remains open.
Report #67: WQG Evaluation	Total mercury and methylmercury above WQG.	In general, there has been an increased incidence of total mercury and methylmercury concentrations above the BC WQGs in site contact waters since late April through late September. The highest values were observed in June, with total mercury and total methyl mercury up to 22.4 times above their respective WQGs in sedimentation pond water (effluent was discharged June 1 and 6, the highest mercury values in June were observed in effluent that was recirculated and not discharged). From July to September the concentrations of total mercury and total methyl mercury ranged from 1.4 to 6.4 times the WQGs; during this time effluent has been generally recirculated and was infrequently discharged (on August 15 and 16, and September 14, 15, 16, 26 and 27). Literature review suggests microbially mediated mercury methylation processes can occur in the water column and bottom sediments of sumps and ponds and that these processes are significantly accelerated during warmer temperatures. The concentration of methylmercury is expected to generally decline with the onset of cooler rainy season temperatures and increased stormwater flows that are anticipated reduce rate of methylmercury formation and release to contact water. BCER has been notified that additional filtration will be added to the East WWTP treatment train and this is expected to also reduce the concentration of total mercury and total methylmercury in WWTP effluent. Further evaluation will be conducted after additional data are collected. This item remains open.
Report #80: Pending Data	Analytical results not reported.	Dioxins and furans results for freshwater and estuarine water receiving environment samples collected September 6 are discussed in Section 3.6 of Report #83. This item is closed.
Report #81: Pending Data	Analytical results not reported.	Dioxins and furans results for freshwater receiving environment samples collected September 7, dioxin and furans results for contact water and treated water samples collected September 8, and field parameters and analytical results for marine water receiving environment samples collected September 12 and 13 are discussed in Sections 3.6, 3.4 and 3.7, respectively, of Report #83. Methylmercury results for freshwater receiving environment samples collected September 7 were not included with Report #83. The pending results will be included in future weekly reports when available. This item remains open.
Report #82: Pending Data	Analytical results not reported.	Field parameters and analytical results for marine receiving environment samples collected September 15 and analytical results for contact water and treated water samples collected September 20 are discussed in Sections 3.7 and 3.3, respectively, of Report #83. Dioxins and furans results for contact water and treated water samples collected September 14 and 15 and methylmercury results for contact water and treated water samples collected September 20 were not included with Report #83. 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.

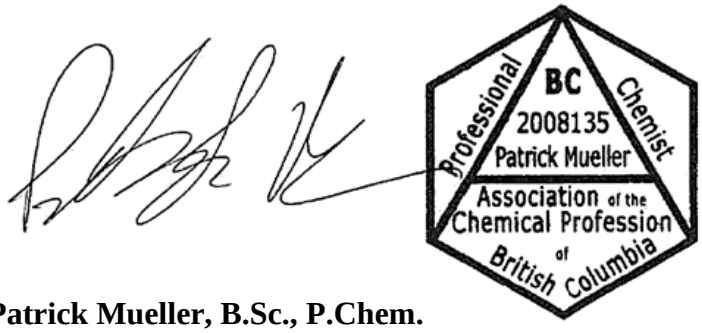
4. Closure

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

Regards,

LORAX ENVIRONMENTAL SERVICES LTD.

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



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

Appendix A:
Figures and Site Images

World Imagery: District of Squamish. Additional imagery provided by McDermott International captured September 30st, 2025.

LEGEND

- Freshwater Monitoring Station
- Marine Water Monitoring Station
- Clean Water Diversion Discharge Station
- Sedimentation Pond Monitoring Stations (Water Quality)
- Wastewater Treatment Plant (WWTP)
- Certified Project Area
- Watercourse
- East Creek Temporary Diversion
- Non-Contact Ditch
- Culvert / Outfall / Pipeline
- Bathymetry Contour (Major: 50m)
- Bathymetry Contour (Minor: 10m)

DATE SAVED:	Oct 03, 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

0 100 200 Metres

CLIENT: Woodfibre LNG

LORAX ENVIRONMENTAL

PROJECT: **Woodfibre LNG Project Construction Phase**

TITLE: Site Layout and Water Quality Monitoring Stations for PE-111578 (September 27, 2025)

PROJECT #: A633-9

FIGURE: 1

P:\@202506\Woodfibre\Drafting Figures\APRX\WLNG Weekly Report Figure\WLNG Weekly Report.aprx Figure 1 - Monitoring and Compliance Locations

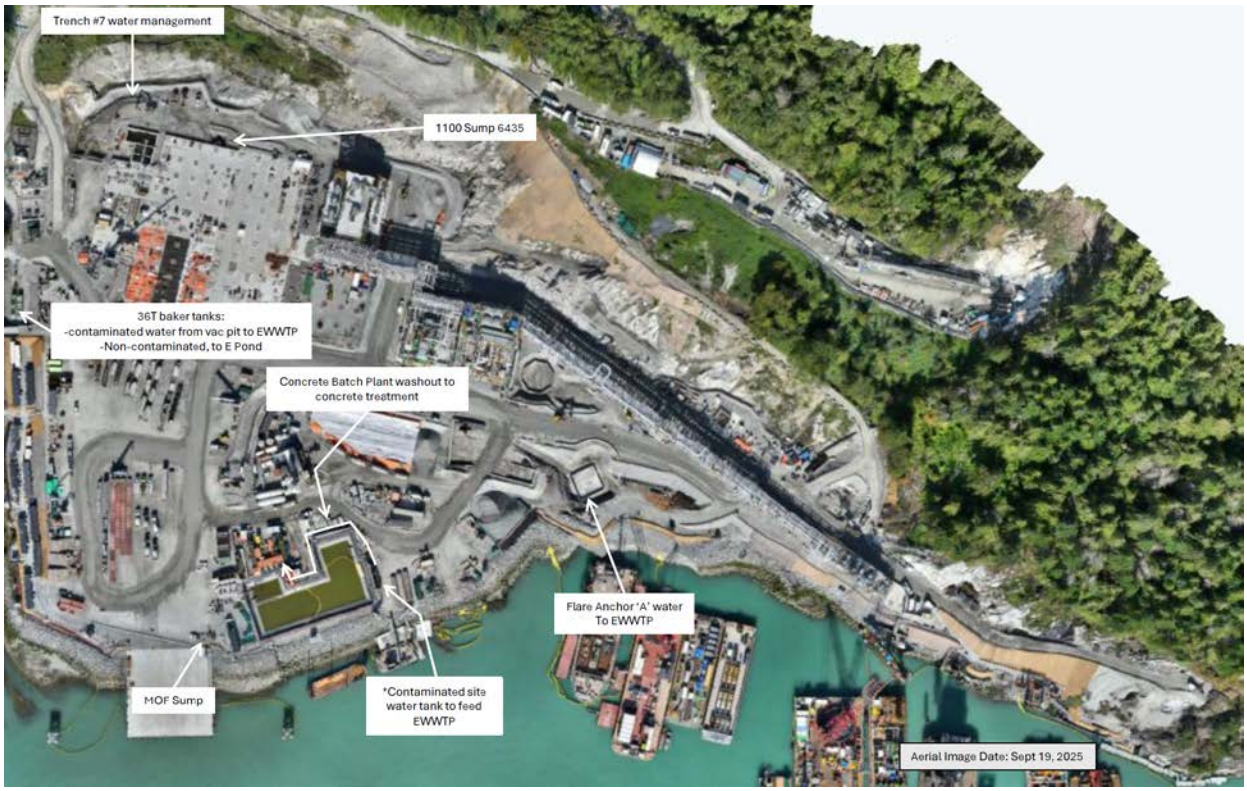


Figure 2: East Catchment contact water management facilities (September 21 – 27).

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

Figure 4: Aerial view of the East Sedimentation Pond (September 26, 2025). The East WWTP is located on the left side of the pond.

Figure 5: Aerial view of the West Sedimentation Pond (September 26, 2025).

Appendix B:
East Catchment Monitoring Results

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

Parameter	Unit	Lowest Applicable Guideline [1]		PE-111578 Discharge Limit	Station WWTP-E-IN	Station WWTP-E-OUT
					Influent	Effluent
					WWTP-E-IN	WWTP-E-OUT
					VA25C4933-002	VA25C4933-011
		Long Term	Short Term		2025-09-20 13:05	2025-09-20 19:20
General Parameters						
pH - Field	pH units	- [2]	-	5.5 - 9.0	7.8	6.7
Specific Conductivity - Field	µS/cm	-	-	-	3015	3150
Temperature - Field	°C	-	-	-	23	19.7
Salinity - Field	ppt	-	-	-	1.57	1.65
Turbidity - Field	NTU	-	-	-	14.23	9.78
TSS	mg/L	-	-	25 or 75 [6]	8.1	3.3
Dissolved Oxygen - Field	mg/L	≥8	-	-	9.84	***7.09***
Total Hardness	mg/L	-	-	-	25.8	17.5
Dissolved Hardness	mg/L	-	-	-	23.8	15
Anions and Nutrients						
Sulphate	mg/L	-	-	-	776	771
Chloride	mg/L	-	-	-	28.4	35.4
Fluoride	mg/L	-	1.5	-	<0.400	<0.400
Ammonia (N-NH_3)	mg/L	1.5-14 [3]	10-92 [3]	-	<0.0050	0.024
Nitrite (N-NO_2)	mg/L	-	-	-	<0.0200	<0.0200
Nitrate (N-NO_3)	mg/L	3.7	339	-	<0.100	<0.100
Total Organic Carbon (TOC)	mg/L	-	-	-	5.1	4.77
Dissolved Organic Carbon (DOC)	mg/L	-	-	-	3.15	2.87
Total Metals						
Aluminum, total (T-Al)	mg/L	-	-	-	0.775	0.554
Antimony, total (T-Sb)	mg/L	-	0.27 [4]	-	0.00124	0.00129
Arsenic, total (T-As)	mg/L	0.0125	0.0125	-	0.00214	0.00195
Barium, total (T-Ba)	mg/L	-	-	-	0.0141	0.00615
Beryllium, total (T-Be)	mg/L	0.1	-	-	<0.000100	<0.000100
Boron, total (T-B)	mg/L	1.2	-	-	0.092	0.091
Cadmium, total (T-Cd)	mg/L	0.00012	-	-	<0.0000400	<0.0000400
Chromium, total (T-Cr)	mg/L	-	-	-	0.00303	0.00428
Cobalt, total (T-Co)	mg/L	-	-	-	<0.00050	<0.00050
Copper, total (T-Cu)	mg/L	- [2]	- [2]	0.0043	0.00396	0.0169
Iron, total (T-Fe)	mg/L	-	-	-	0.993	0.816
Lead, total (T-Pb)	mg/L	- [2]	- [2]	0.0035	0.00262	0.00429
Manganese, total (T-Mn)	mg/L	-	-	-	0.0186	0.015
Molybdenum, total (T-Mo)	mg/L	-	-	-	0.076	0.0911
Nickel, total (T-Ni)	mg/L	0.0083	-	-	<0.00250	<0.00250
Selenium, total (T-Se)	mg/L	0.002	-	-	0.000647	0.000681
Silver, total (T-Ag)	mg/L	0.0005	0.0037	-	<0.000050	<0.000050
Thallium, total (T-Tl)	mg/L	-	-	-	<0.000050	<0.000050
Uranium, total (T-U)	mg/L	-	-	-	0.014	0.0155
Vanadium, total (T-V)	mg/L	- [2]	-	0.0081	0.00424	0.004
Zinc, total (T-Zn)	mg/L	- [2]	- [2]	0.0133	<0.0150	0.0156
Hexavalent Chromium, total	mg/L	0.0015	-	-	- [7]	- [7]
Dissolved Metals						
Cadmium, dissolved (D-Cd)	mg/L	-	-	-	<0.0000250	<0.0000250
Copper, dissolved (D-Cu)	mg/L	-	-	-	0.0024	0.00258
Iron, dissolved (D-Fe)	mg/L	-	-	-	0.097	<0.050
Lead, dissolved (D-Pb)	mg/L	-	-	-	0.000261	<0.000250
Manganese, dissolved (D-Mn)	mg/L	-	-	-	0.00446	0.00481
Nickel, dissolved (D-Ni)	mg/L	-	-	-	<0.00250	<0.00250
Strontium, dissolved (D-Sr)	mg/L	-	-	-	0.113	0.0971
Vanadium, dissolved (D-V)	mg/L	-	-	-	0.00295	0.00295
Zinc, dissolved (D-Zn)	mg/L	-	-	-	<0.0050	<0.0050
Polycyclic Aromatic Hydrocarbons (PAHs)						
Acenaphthene	mg/L	0.006	-	-	-	-
Acridine	mg/L	-	-	-	-	-
Anthracene	mg/L	-	-	-	-	-
Benz(a)anthracene	mg/L	-	-	-	-	-
Benzo(a)pyrene	mg/L	0.00001	-	-	-	-
Chrysene	mg/L	0.0001	-	-	-	-
Fluoranthene	mg/L	-	-	-	-	-
Fluorene	mg/L	0.012	-	-	-	-
1-methylnaphthalene	mg/L	0.001	-	-	-	-
2-methylnaphthalene	mg/L	0.001	-	-	-	-
Naphthalene	mg/L	0.001	-	-	-	-
Phenanthrene	mg/L	-	-	-	-	-
Pyrene	mg/L	-	-	-	-	-
Quinoline	mg/L	-	-	-	-	-
Volatile Organic Compounds (VOCs)						
Benzene	mg/L	0.11	-	-	-	-
Ethylbenzene	mg/L	0.25	-	-	-	-
Methyl-tert-butyl-ether	mg/L	5	0.44	-	-	-
Styrene	mg/L	-	-	-	-	-
Toluene	mg/L	0.215	-	-	-	-
Total Xylenes	mg/L	-	-	-	-	-
Chlorobenzene	mg/L	0.025	-	-	-	-
1,2-Dichlorobenzene	mg/L	0.042	-	-	-	-

Notes:
East catchment influents and East WWTP effluent were not discharged to Howe Sound. Results above screening values are only highlighted for comparative purposes.
Non-detect results are screened using the detection limit value.
Results ***underlined in bold italics*** exceed the applicable long-term water quality guideline for the protection of marine water aquatic life.
Shaded results exceed the applicable short-term water quality guideline for the protection of marine water aquatic life.
Results in orange text exceed the PE-111578 East Sedimentation Pond Discharge Limit.
The East Catchment did not discharge during the monitoring period (September 21 – 27).
[1] The lowest applicable guidelines from approved or working BC WQGs, Canadian (CCME) WQGs and Federal WQGs.
[2] The WQG was not evaluated for parameters with discharge limits.
[3] The BC WQG for total ammonia is salinity, pH and temperature dependent; see Tables 27E and 27F in BC WQG guidance document.
[4] The working BC WQG for trivalent antimony [SB(III)] is 0.27 mg/L and is applied to total antimony results.
[5] When MeHg ≤0.5% of total Hg, the BC WQG = 0.00002 mg/L. The Canadian WQG = 0.000016 mg/L.
[6] The PE-111578 discharge limit for TSS is 25 mg/L under dry conditions and 75 mg/L for each day of Wet Conditions.
[7] Results for hexavalent chromium are pending and will be reported when they are available.

Table B-2:
East Sedimentation Pond Influent and Effluent Analytical Results Received at the Time of Reporting.

Parameter	Unit	Lowest Applicable Guideline [1]		PE-111578 Discharge Limit	Station SP-E-IN Effluent SP-E-IN VA25C4933-001 2025-09-20 8:10
		Long Term	Short Term		
General Parameters					
pH - Field	pH units	- [2]	-	5.5 - 9.0	7.0
Specific Conductivity - Field	µS/cm	-	-	-	3030
Temperature - Field	°C	-	-	-	18
Salinity - Field	ppt	-	-	-	1.59
Turbidity - Field	NTU	-	-	-	28.43
TSS	mg/L	-	-	25 or 75 [6]	23.9
Dissolved Oxygen - Field	mg/L	≥8	-	-	9.07
Total Hardness	mg/L	-	-	-	24.3
Dissolved Hardness	mg/L	-	-	-	21.8
Anions and Nutrients					
Sulphate	mg/L	-	-	-	839
Chloride	mg/L	-	-	-	28.1
Fluoride	mg/L	-	1.5	-	<0.400
Ammonia (N-NH_3)	mg/L	14 [3]	92 [3]	-	0.0305
Nitrite (N-NO_2)	mg/L	-	-	-	<0.0200
Nitrate (N-NO_3)	mg/L	3.7	339	-	<0.100
Total Organic Carbon (TOC)	mg/L	-	-	-	4.59
Dissolved Organic Carbon (DOC)	mg/L	-	-	-	2.9
Total Metals					
Aluminum, total (T-Al)	mg/L	-	-	-	1.16
Antimony, total (T-Sb)	mg/L	-	0.27 [4]	-	0.00146
Arsenic, total (T-As)	mg/L	0.0125	0.0125	-	0.00241
Barium, total (T-Ba)	mg/L	-	-	-	0.0166
Beryllium, total (T-Be)	mg/L	0.1	-	-	<0.000040
Boron, total (T-B)	mg/L	1.2	-	-	0.096
Cadmium, total (T-Cd)	mg/L	0.00012	-	-	<0.0000400
Chromium, total (T-Cr)	mg/L	-	-	-	0.00477
Cobalt, total (T-Co)	mg/L	-	-	-	0.00044
Copper, total (T-Cu)	mg/L	- [2]	- [2]	0.0043	0.00458
Iron, total (T-Fe)	mg/L	-	-	-	1.73
Lead, total (T-Pb)	mg/L	- [2]	- [2]	0.0035	0.00366
Manganese, total (T-Mn)	mg/L	-	-	-	0.0386
Molybdenum, total (T-Mo)	mg/L	-	-	-	0.0861
Nickel, total (T-Ni)	mg/L	0.0083	-	-	0.00113
Selenium, total (T-Se)	mg/L	0.002	-	-	0.000578
Silver, total (T-Ag)	mg/L	0.0005	0.0037	-	<0.000050
Thallium, total (T-Tl)	mg/L	-	-	-	0.000026
Uranium, total (T-U)	mg/L	-	-	-	0.0162
Vanadium, total (T-V)	mg/L	- [2]	-	0.0081	0.00527
Zinc, total (T-Zn)	mg/L	- [2]	- [2]	0.0133	0.0115
Hexavalent Chromium, total	mg/L	0.0015	-	-	- [7]
Dissolved Metals					
Cadmium, dissolved (D-Cd)	mg/L	-	-	-	<0.0000350
Copper, dissolved (D-Cu)	mg/L	-	-	-	0.00175
Iron, dissolved (D-Fe)	mg/L	-	-	-	0.061
Lead, dissolved (D-Pb)	mg/L	-	-	-	0.000162
Manganese, dissolved (D-Mn)	mg/L	-	-	-	0.0085
Nickel, dissolved (D-Ni)	mg/L	-	-	-	<0.00100
Strontium, dissolved (D-Sr)	mg/L	-	-	-	0.122
Vanadium, dissolved (D-V)	mg/L	-	-	-	0.00287
Zinc, dissolved (D-Zn)	mg/L	-	-	-	0.0028
Polycyclic Aromatic Hydrocarbons (PAHs)					
Acenaphthene	mg/L	0.006	-	-	-
Acridine	mg/L	-	-	-	-
Anthracene	mg/L	-	-	-	-
Benz(a)anthracene	mg/L	-	-	-	-
Benzo(a)pyrene	mg/L	0.00001	-	-	-
Chrysene	mg/L	0.0001	-	-	-
Fluoranthene	mg/L	-	-	-	-
Fluorene	mg/L	0.012	-	-	-
1-methylnaphthalene	mg/L	0.001	-	-	-
2-methylnaphthalene	mg/L	0.001	-	-	-
Naphthalene	mg/L	0.001	-	-	-
Phenanthrene	mg/L	-	-	-	-
Pyrene	mg/L	-	-	-	-
Quinoline	mg/L	-	-	-	-
Volatile Organic Compounds (VOCs)					
Benzene	mg/L	0.11	-	-	-
Ethylbenzene	mg/L	0.25	-	-	-
Methyl-tert-butyl-ether	mg/L	5	0.44	-	-
Styrene	mg/L	-	-	-	-
Toluene	mg/L	0.215	-	-	-
Total Xylenes	mg/L	-	-	-	-
Chlorobenzene	mg/L	0.025	-	-	-
1,2-Dichlorobenzene	mg/L	0.042	-	-	-

Notes:
East catchment influents were not discharged to Howe Sound. Results above screening values are only highlighted for comparative purposes.
Non-detect results are screened using the detection limit value.
Results ***underlined in bold italics*** exceed the applicable long-term water quality guideline for the protection of marine water aquatic life.
Shaded results exceed the applicable short-term water quality guideline for the protection of marine water aquatic life.
Results in orange text exceeded the PE-111578 East Sedimentation Pond Discharge Limit.
The East Catchment did not discharge during the monitoring period (September 21 – 27).
[1] The lowest applicable guidelines from approved or working BC WQGs, Canadian (CCME) WQGs and Federal WQGs.
[2] The WQG was not evaluated for parameters with discharge limits.
[3] The BC WQG for total ammonia is salinity, pH and temperature dependent; see Tables 27E and 27F in BC WQG guidance document.
[4] The working BC WQG for trivalent antimony [SB(III)] is 0.27 mg/L and is applied to total antimony results.
[5] When MeHg ≤0.5% of total Hg, the BC WQG = 0.00002 mg/L. The Canadian WQG = 0.000016 mg/L.
[6] The PE-111578 discharge limit for TSS is 25 mg/L under dry conditions and 75 mg/L for each day of Wet Conditions.
[7] Results for hexavalent chromium are pending and will be reported when they are available.

Table B-3:
East Catchment Field Measurements Collected During the Monitoring Period (September 21 – 27).

Parameter			**Temp.**	**Dissolved Oxygen (DO)**	**Salinity**	**Turbidity**	**Estimated TSS [3]**	**pH**	**Specific Conductivity**	**Visibility of Sheen**
Unit			**°C**	**mg/L**	**ppt**	**NTU**	**mg/L**	**s.u.**	**µS/cm**	
PE-111578 Discharge Limit			-	-	-	-	25 or 75 [6]	5.5 - 9.0	-	-
Lowest Applicable Guideline [1]			-	≥8	-	-	- [2]	- [2]	-	-
Station ID	**Water Type**	**Date**								
Influent [4]										
SP-E-IN	Influent	2025-09-21 12:22	21.3	9.21	0.75	191.36	145.7	7.7	1496	No
SP-E-IN	Influent	2025-09-22 12:38	18.3	9.75	0.74	38.92	32.0	7.9	1468	No
SP-E-IN	Influent	2025-09-23 9:46	18.4	9.49	1.02	14.27	13.6	7.6	1984	No
SP-E-IN	Influent	2025-09-24 9:57	18.2	11.46	0.97	14.63	13.9	7.8	1905	No
SP-E-IN	Influent	2025-09-25 14:27	18.2	10.28	1.07	15.64	14.7	8.9	2093	No
SP-E-IN	Influent	2025-09-26 15:44	17.2	9.79	1.08	12.86	12.6	9.1	2105	No
SP-E-IN	Influent	2025-09-27 10:52	16.3	8.5	1.05	8.42	9.3	7.0	2053	No
WWTP-E-IN	Influent	2025-09-21 17:17	19.8	9.86	1.42	48.98	39.5	7.7	2732	No
WWTP-E-IN	Influent	2025-09-22 12:18	18.5	10.23	1.34	45.42	36.9	7.9	2581	No
WWTP-E-IN	Influent	2025-09-23 9:40	17.9	9.79	1.01	39.21	32.2	8	1978	No
WWTP-E-IN	Influent	2025-09-27 8:26	15.9	9.58	0.84	15.91	14.9	9.1	1657	No
Effluent [5]										
WWTP-E-OUT	Effluent	2025-09-21 17:14	18.9	***7.02*** [7]	1.2	32.83	27.5 [7]	7.3	2328	No
WWTP-E-OUT	Effluent	2025-09-22 12:13	17.2	9.85	0.58	3.25	5.4	7.4	1157	No
WWTP-E-OUT	Effluent	2025-09-23 9:38	17	8.90	1.22	2.08	4.6	7.2	2355	No
WWTP-E-OUT	Effluent	2025-09-27 16:09	16.1	***5.56*** [7]	0.95	6.84	8.1	6.2	1865	No

Notes:
The east catchment did not discharge to Howe Sound during the monitoring period (September 21 – 27). Results above screening values are highlighted for comparative purposes.
Results ***underlined in bold italics*** exceed the applicable long-term water quality guideline for the protection of marine water aquatic life.
Shaded results exceed the applicable short-term water quality guideline for the protection of marine water aquatic life.
Results in orange text exceed the PE-111578 East Sedimentation Pond Discharge Limit.
[1] The lowest applicable guidelines from approved or working BC WQGs, Canadian (CCME) WQGs and Federal WQGs.
[2] The WQG was not evaluated for parameters with discharge limits.
[3] TSS concentration is estimated from field turbidity measurements using a site-specific relationship TSS = 0.7458 * [turbidity as NTU] + 3.
[4] Daily field measurements for station SP-E-IN were collected from cell 1 of the East Sedimentation Pond.
[5] There was no discharge at the authorized discharge location (SP-E-OUT) during the monitoring period (September 21 – 27), therefore daily field measurements for SP-E-OUT were not collected on those days. The East WWTP was not operational at the time of monitoring on September 24, 25 and 26, therefore daily field measurements for WWTP-E-OUT were not collected on those days.
[6] The PE-111578 discharge limit for TSS is 25 mg/L under dry conditions and 75 mg/L for each day of Wet Conditions.
[7] East WWTP treated effluent is directed to the East Sedimentation Pond and there was no discharge from the pond to Howe Sound during the monitoring period (September 21 – 27).

Table B-4:
East Catchment Daily Discharge Volumes for the Monitoring Period (September 21 – 27).

	East Sedimentation Pond Effluent	**Transfer to West Sedimentation Pond**	**East WWTP Treated Effluent (Station WWTP-E-OUT)[2]**	**Discharge to Howe Sound (Station SP-E-OUT)**
Unit	**m^3**	**m^3**	**m^3**	**m^3**
PE-111578 Discharge Limit	-	-	1100	- [1]
Date				
2025-09-21	0	0	274	0
2025-09-22	0	0	593	0
2025-09-23	0	0	0	0
2025-09-24	0	0	296	0
2025-09-25	0	0	562	0
2025-09-26	0	0	275	0
2025-09-27	0	0	509	0

Notes:
Results in orange text exceed the PE-111578 East Sedimentation Pond Discharge Limit.
[1] As noted in PE-111578 Condition 2.1.4, the annual average authorized discharge rate from the East Sedimentation Pond to Howe Sound was set to 650 m^3/day for the purpose of calculating discharge fees as required by the Permit and Approval Fees and Charges Regulation. Therefore, the annual average authorized discharge rate is not evaluated as a discharge limit.
[2] East WWTP treated effluent was recirculated to the East Sedimentation Pond.

Appendix C:
West Catchment Monitoring Results

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

Parameter	Unit	Lowest Applicable Guideline [1]		PE-111578 Discharge Limit	Station 2700GPM-OUT Effluent W2700-OUT[7] VA25C5293-001 2025-09-24 13:38	Station 2700GPM-OUT Effluent W2700-OUT[7] VA25C5450-001 2025-09-25 13:54
		Long Term	Short Term			
General Parameters						
pH - Field	pH units	- [2]	-	5.5 - 9.0	8.36	7.38
Specific Conductivity - Field	µS/cm	-	-	-	2216	19.4
Temperature - Field	°C	-	-	-	20.3	18.2
Salinity - Field	ppt	-	-	-	1.14	0.01
Turbidity - Field	NTU	-	-	-	4.96	3.7
TSS	mg/L	-	-	25 or 75 [6]	3.6	<3.0
Dissolved Oxygen - Field	mg/L	≥8	-	-	***6.82***	8.77
Total Hardness	mg/L	-	-	-	49.4	48.7
Dissolved Hardness	mg/L	-	-	-	48.6	52.1
Anions and Nutrients						
Sulphate	mg/L	-	-	-	-	-
Chloride	mg/L	-	-	-	-	-
Fluoride	mg/L	-	1.5	-	-	-
Ammonia (N-NH_3)	mg/L	0.62-8.7 [3]	4.2-58 [3]	-	-	-
Nitrite (N-NO_2)	mg/L	-	-	-	-	-
Nitrate (N-NO_3)	mg/L	3.7	339	-	-	-
Total Organic Carbon (TOC)	mg/L	-	-	-	-	-
Dissolved Organic Carbon (DOC)	mg/L	-	-	-	-	-
Total Metals						
Aluminum, total (T-Al)	mg/L	-	-	-	0.174	0.0367
Antimony, total (T-Sb)	mg/L	-	0.27 [4]	-	0.00112	0.00108
Arsenic, total (T-As)	mg/L	0.0125	0.0125	-	0.00467	0.00305
Barium, total (T-Ba)	mg/L	-	-	-	0.00476	0.0117
Beryllium, total (T-Be)	mg/L	0.1	-	-	<0.000040	<0.000040
Boron, total (T-B)	mg/L	1.2	-	-	<0.020	0.025
Cadmium, total (T-Cd)	mg/L	0.00012	-	-	<0.0000300	<0.0000200
Chromium, total (T-Cr)	mg/L	-	-	-	<0.00100	<0.00100
Cobalt, total (T-Co)	mg/L	-	-	-	<0.00020	<0.00020
Copper, total (T-Cu)	mg/L	- [2]	- [2]	0.0043	0.0014	0.00103
Iron, total (T-Fe)	mg/L	-	-	-	0.12	0.031
Lead, total (T-Pb)	mg/L	- [2]	- [2]	0.0035	0.000481	0.000158
Mercury, total (T-Hg(	mg/L	0.0000108 [8]	-	-	0.00000639	0.00000570
Manganese, total (T-Mn)	mg/L	-	-	-	0.0223	0.00437
Molybdenum, total (T-Mo)	mg/L	-	-	-	0.0756	0.069
Nickel, total (T-Ni)	mg/L	0.0083	-	-	0.0014	<0.00100
Selenium, total (T-Se)	mg/L	0.002	-	-	0.000388	0.000354
Silver, total (T-Ag)	mg/L	0.0005	0.0037	-	<0.000020	<0.000020
Thallium, total (T-Tl)	mg/L	-	-	-	0.000072	0.000049
Uranium, total (T-U)	mg/L	-	-	-	0.0165	0.0134
Vanadium, total (T-V)	mg/L	- [2]	-	0.0081	0.0042	0.0020
Zinc, total (T-Zn)	mg/L	- [2]	- [2]	0.0133	<0.0060	<0.0060
Hexavalent Chromium, total	mg/L	0.0015	-	-	- [9]	- [9]
Dissolved Metals						
Cadmium, dissolved (D-Cd)	mg/L	-	-	-	<0.0000200	<0.0000150
Copper, dissolved (D-Cu)	mg/L	-	-	-	0.00077	0.00092
Iron, dissolved (D-Fe)	mg/L	-	-	-	0.03	0.028
Lead, dissolved (D-Pb)	mg/L	-	-	-	0.000134	0.000134
Manganese, dissolved (D-Mn)	mg/L	-	-	-	0.0181	0.00488
Nickel, dissolved (D-Ni)	mg/L	-	-	-	<0.00100	<0.00100
Strontium, dissolved (D-Sr)	mg/L	-	-	-	0.167	0.191
Vanadium, dissolved (D-V)	mg/L	-	-	-	0.00413	0.00202
Zinc, dissolved (D-Zn)	mg/L	-	-	-	<0.0020	<0.0020
Polycyclic Aromatic Hydrocarbons (PAHs)						
Acenaphthene	mg/L	0.006	-	-	-	-
Acridine	mg/L	-	-	-	-	-
Anthracene	mg/L	-	-	-	-	-
Benz(a)anthracene	mg/L	-	-	-	-	-
Benzo(a)pyrene	mg/L	0.00001	-	-	-	-
Chrysene	mg/L	0.0001	-	-	-	-
Fluoranthene	mg/L	-	-	-	-	-
Fluorene	mg/L	0.012	-	-	-	-
1-methylnaphthalene	mg/L	0.001	-	-	-	-
2-methylnaphthalene	mg/L	0.001	-	-	-	-
Naphthalene	mg/L	0.001	-	-	-	-
Phenanthrene	mg/L	-	-	-	-	-
Pyrene	mg/L	-	-	-	-	-
Quinoline	mg/L	-	-	-	-	-
Volatile Organic Compounds (VOCs)						
Benzene	mg/L	0.11	-	-	-	-
Ethylbenzene	mg/L	0.25	-	-	-	-
Methyl-tert-butyl-ether	mg/L	5	0.44	-	-	-
Styrene	mg/L	-	-	-	-	-
Toluene	mg/L	0.215	-	-	-	-
Total Xylenes	mg/L	-	-	-	-	-
Chlorobenzene	mg/L	0.025	-	-	-	-
1,2-Dichlorobenzene	mg/L	0.042	-	-	-	-

Notes:
West catchment influents were not discharged to Howe Sound. Influent results above screening values are only highlighted for comparative purposes.
Non-detect results are screened using the detection limit value.
Results ***underlined in bold italics*** exceed the applicable long-term water quality guideline for the protection of marine water aquatic life.
Shaded results exceed the applicable short-term water quality guideline for the protection of marine water aquatic life.
Results in orange text exceed the PE-111578 West Sedimentation Pond Discharge Limit.
The West Catchment discharged during the monitoring period (September 21 – 27) on September 26 and 27.
[1] The lowest applicable guidelines from approved or working BC WQGs, Canadian (CCME) WQGs and Federal WQGs.
[2] The WQG was not evaluated for parameters with discharge limits.
[3] The BC WQG for total ammonia is salinity, pH and temperature dependent; see Tables 27E and 27F in BC WQG guidance document.
[4] The working BC WQG for trivalent antimony [SB(III)] is 0.27 mg/L and is applied to total antimony results.
[5] When MeHg ≤0.5% of total Hg, the BC WQG = 0.00002 mg/L. The Canadian WQG = 0.000016 mg/L.
[6] The PE-111578 discharge limit for TSS is 25 mg/L under dry conditions and 75 mg/L for each day of Wet Conditions.
[7] 2700GPM clarified effluent was sampled at the combined outlet sampling port on September 24 (Train 1 and 2 combined) and September 25 (Train 2 only). 2700GPM clarified effluent was recirculated to the West Sedimentation Pond on those days.
[8] Methylmercury was not tested. The total mercury WQG is derived from the methylmercury concentration (0.000000375 mg/L) reported for the September 15 sample from 2700GPM-OUT.
[9] Hexavalent chromium was not tested in this sample. The corresponding total chromium result meets the WQG for hexavalent chromium.

Table C-2:
West Catchment Dioxin and Furan Toxicity Equivalency Quantity (TEQ) Results Received at the Time of Reporting.

Parameter					**Lower Bound PCDD/F TEQ**	**Upper Bound PCDD/F TEQ**
Unit					**pg/L**	**pg/L**
Station	**Water Type**	**Sample ID**	**Lab ID**	**Sampling Date**		
Influent						
2700GPM-IN	Influent	2700GPM-IN	VA25C3197-002	2025-09-08	0.00618	0.879
Effluent						
2700GPM-OUT	Effluent	2700GPM-OUT	VA25C3197-003	2025-09-08	0	0.947

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

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

Parameter			**Temperature**	**Dissolved Oxygen (DO)**	**Salinity**	**Turbidity**	**Estimated TSS [3]**	**pH**	**Specific Conductivity**	**Visibility of Sheen**
Unit			**°C**	**mg/L**	**ppt**	**NTU**	**mg/L**	**s.u.**	**µS/cm**	
PE-111578 Discharge Limit			-	-	-	-	25 or 75 [6]	5.5 - 9.0	-	-
Lowest Applicable Guideline [1]			-	≥8	-	-	- [2]	- [2]	-	-
Station ID	**Water Type**	**Date**								
Influent [4]										
SP-W-IN	Influent	2025-09-21 8:51	18.4	8.43	1.09	52.86	42.4	8.1	2119	No
SP-W-IN	Influent	2025-09-22 11:38	19.3	9.09	1.24	5.24	6.9	8.4	2409	No
SP-W-IN	Influent	2025-09-23 9:56	18.9	8.25	1.25	5.13	6.8	8.4	2411	No
SP-W-IN	Influent	2025-09-24 10:31	18.6	9.85	1.07	21.5	19.0	8.2	2086	No
SP-W-IN	Influent	2025-09-24 14:01	20.2	9.28	1.13	12.62	12.4	8.2	2200	Yes
SP-W-IN	Influent	2025-09-25 15:19	19.0	8.91	1.15	3.94	5.9	7.2	2225	No
SP-W-IN	Influent	2025-09-26 15:58	17.6	8.44	1.15	4.14	6.1	7.2	2226	No
SP-W-IN	Influent	2025-09-27 13:53	16.3	9.33	0.99	74.06	58.2	7.3	1935	No
2700GPM-IN	Influent	2025-09-21 8:39	18.4	8.30	0.97	81.5	63.8	8.3	1904	No
2700GPM-IN	Influent	2025-09-22 11:47	19.1	9.50	1.24	10.65	10.9	8.4	2404	No
2700GPM-IN	Influent	2025-09-23 10:00	19.0	10.51	1.25	5.62	7.2	8.5	2413	No
2700GPM-IN	Influent	2025-09-24 10:25	19.3	10.38	1.25	4.55	6.4	8.5	2420	No
2700GPM-IN	Influent	2025-09-24 14:20	20.3	10.36	1.19	10.06	10.5	8.4	2311	No
2700GPM-IN	Influent	2025-09-25 13:51	18.6	8.96	1.19	5.29	6.9	7.6	2300	No
2700GPM-IN	Influent	2025-09-26 14:09	17.7	9.02	1.17	8.82	9.6	7.5	2267	No
2700GPM-IN	Influent	2025-09-27 12:03	16.5	9.63	1.03	25.03	21.7	7.4	2009	No
Effluent [5]										
2700GPM-OUT	Effluent	2025-09-21 10:55	18.8	8.45	1.12	9.7	10.2	8.4	2186	No
2700GPM-OUT	Effluent	2025-09-22 11:44	19.2	8.30	1.24	4.3	6.2	8.3	2404	No
2700GPM-OUT	Effluent	2025-09-23 10:15	20.1	8.69	1.25	3.97	6.0	8.2	2415	No
2700GPM-OUT	Effluent	2025-09-24 13:38	20.3	***6.82*** [7]	1.14	4.96	6.7	8.4	2216	No
2700GPM-OUT	Effluent	2025-09-25 13:54	18.2	8.77	0.01	3.7	5.8	7.4	19.4	No
2700GPM-OUT (SP-W-OUT)	Effluent	2025-09-26 14:29	17.4	8.19	1.15	4.1	6.1	7.6	2230	No
2700GPM-OUT (SP-W-OUT)	Effluent	2025-09-26 19:28	17.3	8.66	1.14	3.58	5.7	6.6	2221	No
2700GPM-OUT (SP-W-OUT)	Effluent	2025-09-27 12:53	16.6	9.72	1.05	5.7	7.3	7.4	2039	No

Notes:
West catchment influents for September 21 – 27, and effluent from September 21 – 25 were not discharged to Howe Sound. Results above screening values are only highlighted for comparative purposes.
Results ***underlined in bold italics*** exceed the applicable long-term water quality guideline for the protection of marine water aquatic life.
Shaded results exceed the applicable short-term water quality guideline for the protection of marine water aquatic life.
Results in orange text exceed the PE-111578 West Sedimentation Pond Discharge Limit.
[1] The lowest applicable guidelines from approved or working BC WQGs, Canadian (CCME) WQGs and Federal WQGs.
[2] The WQG was not evaluated for parameters with discharge limits.
[3] TSS concentration is estimated from field turbidity measurements using a site-specific relationship TSS = 0.7458 * [turbidity as NTU] + 3.
[4] Daily field measurements for station SP-W-IN were collected from cell 1 of the West Sedimentation Pond.
[5] 2700GPM clarified effluent from Train 1 and Train 2 was intermittently discharged to Howe Sound at the authorized discharge location (SP-W-OUT) on September 26 and 27. As described in Section 1.1, when there is surplus water, West Sedimentation Pond clarified effluent from the individual 2700GPM trains is directed to SP-W-OUT for discharge. The SP-W-OUT monitoring station is not currently safe to access. Until safe access is restored, the SP-W-OUT station is monitored at the outlet from the individual 2700GPM TSS settling trains and/or at the outlet after effluent from Trains 1 through 4 are combined. From September 21 through September 25, 2700GPM clarified effluent was directed to the West Sedimentation Pond and there was no discharge at the authorized discharge location (SP-W-OUT); therefore, daily field measurements for SP-W-OUT were not collected on those days.
[6] The PE-111578 discharge limit for TSS is 25 mg/L under dry conditions and 75 mg/L for each day of Wet Conditions.
[7] 2700GPM clarified effluent was collected at the combined effluent outlet (Train 1 and 2) and directed to the West Sedimentation Pond. There was no discharge from the pond to Howe Sound on September 24.

Table C-4:
West Catchment Daily Discharge Volumes for the Monitoring Period (September 21 – 27).

	West Sedimentation Pond Effluent	West TSS Settling System (2700GPM) Clarified Effluent (Station 2700GPM-OUT)[3]	Water Reclaimed for Construction Purposes (Station 2700GPM-OUT)	West WWTP Treated Effluent [1] (Station WWTP-W-OUT)	Discharge to Howe Sound (Station SP-W-OUT)
Unit	**m^3**	**m^3**	**m^3**	**m^3**	**m^3**
PE-111578 Discharge Limit	-	-	-	120	- [2]
Date					
2025-09-21	0	1,556	0	0	0
2025-09-22	0	979	0	0	0
2025-09-23	0	221	0	0	0
2025-09-24	0	1,418	0	0	0
2025-09-25	0	1,531	0	0	0
2025-09-26	0	1,945	29	0	880
2025-09-27	0	1,785	0	0	377

Notes:
Results in orange text exceed the PE-111578 West Sedimentation Pond Discharge Limit.
[1] The West WWTP is not being operated, therefore discharges are not expected from this facility.
[2] As noted in PE-111578 Condition 2.2.4, the annual average authorized discharge rate from the West Sedimentation Pond to Howe Sound was set to 310 m^3/day for the purpose of calculating discharge fees as required by the Permit and Approval Fees and Charges Regulation. Therefore, the annual average authorized discharge rate is not evaluated as a discharge limit.
[3] Commissioning and pilot testing of a larger TSS settling system (2700GPM) continued during the monitoring period (September 21 – 27). Clarified effluent from the 2700GPM TSS settling system is recirculated to the West Sedimentation Pond, discharged to Howe Sound or reclaimed for construction purposes based on operational considerations. Daily discharge volumes from station 2700GPM-OUT are a sum of all active treatment trains.

Appendix D:
Freshwater Receiving Environment Results

Table D-1:
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	VA25C3150-001	2025-09-07	0	0.918
SW-04	Lower Reach of East Creek (near the outlet to the outfall culvert)	SW-04	VA25C3150-002	2025-09-07	0.0107	0.841
SW-02	Lower Freshwater Reach of Mill Creek (upstream of the third bridge)	SW-02	VA25C3082-001	2025-09-06	0	1.24
SW-07	Upstream Mill Creek (at the diversion inlet)	SW-07	VA25C3082-003	2025-09-06	0.000330	1.07

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:
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	VA25C3082-002	2025-09-06	0	1.00

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-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
				VA25C4028-001	VA25C4028-002	VA25C4028-003	VA25C4028-004	VA25C4028-005	VA25C4028-006
		Long Term	Short Term	2025-09-12 17:10	2025-09-12 17:00	2025-09-12 16:40	2025-09-12 15:15	2025-09-12 14:50	2025-09-12 14:20
General Parameters									
pH - Field	pH units	7.0 - 8.7	-	7.78	7.76	7.73	8.03	7.95	7.47
Specific Conductivity - Field	µS/cm	-	-	8217	11495	43533	7427	8565	45458
Temperature - Field	℃	-	-	16.3	16.1	13.4	16.3	16	11.3
Salinity - Field	ppt	Narrative [2]	-	4.59	6.58	28.05	4.12	4.8	29.34
Turbidity - Field	NTU	Narrative [2]	Narrative [2]	12.95	10.7	3.92	12.06	12.33	2.95
TSS	mg/L	Narrative [2]	Narrative [2]	7.6	7.2	7.6	10.2	10.9	3.1
Dissolved Oxygen - Field	mg/L	>=8	-	9.67	9.94	***7.89***	9.84	9.98	***5.93***
Total Hardness	mg/L	-	-	771.00	820	3470	630	675	5630
Dissolved Hardness	mg/L	-	-	814.00	876	3780	631	706	6020
Anions and Nutrients									
Sulphate	mg/L	-	-	350	358	1440	251	246	1940
Chloride	mg/L	-	-	2530	2610	10100	1870	1840	13800
Fluoride	mg/L	-	1.5	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Ammonia (N-NH_3)	mg/L	1.4-8.7 [3]	9.4-58 [3]	0.01	0.0095	0.008	0.0105	0.0117	0.0082
Nitrite (N-NO_2)	mg/L	-	-	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
Nitrate (N-NO_3)	mg/L	3.7	339	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
Total Organic Carbon (TOC)	mg/L	-	-	0.67	0.68	0.98	2.4	1.88	1.07
Dissolved Organic Carbon (DOC)	mg/L	-	-	0.87	0.67	0.98	2.65	2.08	1.01
Total Metals									
Aluminum, total (T-Al)	mg/L	-	-	0.149	0.152	0.121	0.38	0.344	0.0412
Antimony, total (T-Sb)	mg/L	-	0.27 [4]	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010
Arsenic, total (T-As)	mg/L	0.0125	0.0125	<0.00040	<0.00040	0.00096	0.00049	0.00045	0.00142
Barium, total (T-Ba)	mg/L	-	-	0.0214	0.0207	0.0176	0.0194	0.0204	0.0116
Beryllium, total (T-Be)	mg/L	0.1	-	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050
Boron, total (T-B)	mg/L	1.2	-	0.58	0.57	***1.88***	0.48	0.49	***2.72***
Cadmium, total (T-Cd)	mg/L	0.00012	-	<0.000020	0.000021	0.000065	0.000025	<0.000020	0.000091
Chromium, total (T-Cr)	mg/L	-	-	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050
Cobalt, total (T-Co)	mg/L	-	-	0.000116	0.000108	0.000113	0.000108	0.000123	0.000124
Copper, total (T-Cu)	mg/L	0.002	0.003	0.00176	***0.00244***	0.00133	***0.00282***	***0.00402***	0.00101
Iron, total (T-Fe)	mg/L	-	-	0.128	0.124	0.113	0.163	0.175	0.047
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	-	-	0.016	0.0156	0.0106	0.0212	0.0202	0.00594
Molybdenum, total (T-Mo)	mg/L	-	-	0.00188	0.00186	0.00619	0.00518	0.00424	0.00944
Nickel, total (T-Ni)	mg/L	0.0083	-	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050
Selenium, total (T-Se)	mg/L	0.002	-	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050
Silver, total (T-Ag)	mg/L	0.0005	0.0037	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010
Thallium, total (T-Tl)	mg/L	-	-	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050
Uranium, total (T-U)	mg/L	-	-	0.000445	0.000482	0.00176	0.00113	0.000915	0.00249
Vanadium, total (T-V)	mg/L	0.005	-	0.00085	0.00083	0.00124	0.0009	0.00094	0.00144
Zinc, total (T-Zn)	mg/L	0.01	0.055	0.0035	0.0039	<0.0030	0.0087	0.0053	0.0036
Hexavalent Chromium, total	mg/L	0.0015	-	<0.00150	<0.00150	<0.00150	<0.00150	<0.00150	<0.00150
Dissolved Metals									
Cadmium, dissolved (D-Cd)	mg/L	-	-	<0.000020	0.000022	0.000051	0.000021	0.000022	0.000084
Copper, dissolved (D-Cu)	mg/L	-	-	0.0012	0.00142	0.00106	0.00196	0.00223	<0.00050
Iron, dissolved (D-Fe)	mg/L	-	-	<0.010	<0.010	<0.010	0.037	0.021	<0.010
Lead, dissolved (D-Pb)	mg/L	-	-	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010
Manganese, dissolved (D-Mn)	mg/L	-	-	0.0123	0.0124	0.00812	0.0195	0.0156	0.00602
Nickel, dissolved (D-Ni)	mg/L	-	-	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050
Strontium, dissolved (D-Sr)	mg/L	-	-	1.01	1.03	3.94	0.762	0.808	6.54
Vanadium, dissolved (D-V)	mg/L	-	-	0.00058	0.00054	0.00097	0.0006	0.00054	0.00137
Zinc, dissolved (D-Zn)	mg/L	-	-	0.0035	0.0038	0.0024	0.005	0.004	0.0039
Polycyclic Aromatic Hydrocarbons (PAHs)									
Acenaphthene	mg/L	0.006	-	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	0.00001
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	0.000011	<0.000010	<0.000010	<0.000010	<0.000010
Naphthalene	mg/L	0.001	-	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050
Phenanthrene	mg/L	-	-	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020
Pyrene	mg/L	-	-	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010
Quinoline	mg/L	-	-	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050
Volatile Organic Compounds (VOCs)									
Benzene	mg/L	0.11	-	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050
Ethylbenzene	mg/L	0.25	-	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050
Methyl-tert-butyl-ether	mg/L	5	0.44	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050
Styrene	mg/L	-	-	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050
Toluene	mg/L	0.215	-	<0.00040	<0.00040	<0.00040	<0.00040	<0.00040	<0.00040
Total Xylenes	mg/L	-	-	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050
Chlorobenzene	mg/L	0.025	-	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050
1,2-Dichlorobenzene	mg/L	0.042	-	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050

Notes:
Results ***underlined in bold italics*** exceed the applicable long-term water quality guideline for the protection of marine water aquatic life.
Shaded results exceed the applicable short-term water quality guideline for the protection of marine water aquatic life.
[1] The lowest applicable guidelines from approved or working BC WQGs, Canadian (CCME) WQGs and Federal WQGs.
[2] Narrative guideline for the evaluation of change from background conditions arising from discharges to the aquatic environment. Salinity WQG was not evaluated. The water quality data presented in the table were collected when the site was not discharging, therefore the turbidity and TSS WQGs were not evaluated.
[3] The approved total ammonia nitrogen BC WQG is salinity, pH and temperature dependent; see Tables 26E and 26F in BC WQG guidance document.
[4] The working BC WQG for trivalent antimony [SB(III)] is 0.27 mg/L and is applied to total antimony results.
[5] When MeHg ⩽ 0.5% of total Hg, BC WQG = 0.00002 mg/L. The Canadian WQG = 0.000016 mg/L.

Table F-2:
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
				VA25C4124-001	VA25C4124-002	VA25C4124-003	VA25C4124-004	VA25C4124-005	VA25C4124-006
		Long Term	Short Term	2025-09-15 13:00	2025-09-15 12:45	2025-09-15 12:25	2025-09-15 13:50	2025-09-15 13:40	2025-09-15 13:15
General Parameters									
pH - Field	pH units	7.0 - 8.7	-	7.51	7.86	7.45	7.78	7.65	7.47
Specific Conductivity - Field	µS/cm	-	-	5452	16995	46214	5346	17566	46256
Temperature - Field	℃	-	-	13.2	14.7	10.1	13.3	14.6	10
Salinity - Field	ppt	Narrative [2]	-	2.96	10.04	29.81	2.9	10.43	29.84
Turbidity - Field	NTU	Narrative [2]	Narrative [2]	17.31	10.35	0.96	16.88	15.23	1.22
TSS	mg/L	Narrative [2]	Narrative [2]	12.7	14.9	10.7	13.5	14.0	3.9
Dissolved Oxygen - Field	mg/L	>=8	-	10.18	10.09	***5.36***	10.43	9.95	***5.41***
Total Hardness	mg/L	-	-	479	1030	394	508	633	6080
Dissolved Hardness	mg/L	-	-	501	1000	394	510	623	6390
Anions and Nutrients									
Sulphate	mg/L	-	-	157	329	123	164	197	2190
Chloride	mg/L	-	-	1380	2850	1150	1510	1790	16500
Fluoride	mg/L	-	1.5	<1.0	<1.0	<1.0	<1.0	<1.0	1.0
Ammonia (N-NH_3)	mg/L	3.1-8.7 [3]	21-58 [3]	0.0174	0.0155	0.0362	0.0253	0.0162	0.0142
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	0.59	<0.50	0.62	<0.50	<0.50	0.69
Total Organic Carbon (TOC)	mg/L	-	-	<0.50	0.5	0.61	<0.50	0.66	1.07
Dissolved Organic Carbon (DOC)	mg/L	-	-	0.63	0.57	0.79	0.5	0.57	1.00
Total Metals									
Aluminum, total (T-Al)	mg/L	-	-	0.492	0.637	0.298	0.362	0.458	0.0314
Antimony, total (T-Sb)	mg/L	-	0.27 [4]	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010
Arsenic, total (T-As)	mg/L	0.0125	0.0125	<0.00040	0.00042	<0.00040	<0.00040	<0.00040	0.00157
Barium, total (T-Ba)	mg/L	-	-	0.0229	0.0251	0.0184	0.0212	0.0218	0.0107
Beryllium, total (T-Be)	mg/L	0.1	-	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050
Boron, total (T-B)	mg/L	1.2	-	0.44	0.73	0.33	0.40	0.44	***3.77***
Cadmium, total (T-Cd)	mg/L	0.00012	-	<0.000020	0.00002	<0.000020	<0.000020	<0.000020	0.000077
Chromium, total (T-Cr)	mg/L	-	-	<0.00050	0.00054	<0.00050	<0.00050	<0.00050	<0.00050
Cobalt, total (T-Co)	mg/L	-	-	0.000212	0.000274	0.000153	0.000171	0.000209	0.000098
Copper, total (T-Cu)	mg/L	0.002	0.003	0.00131	0.00147	0.00100	0.00113	0.00132	0.00066
Iron, total (T-Fe)	mg/L	-	-	0.406	0.532	0.257	0.301	0.364	0.038
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	-	-	0.0208	0.0231	0.0163	0.0175	0.0194	0.00509
Molybdenum, total (T-Mo)	mg/L	-	-	0.00108	0.00186	0.00100	0.00214	0.00148	0.00928
Nickel, total (T-Ni)	mg/L	0.0083	-	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050
Selenium, total (T-Se)	mg/L	0.002	-	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050
Silver, total (T-Ag)	mg/L	0.0005	0.0037	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010
Thallium, total (T-Tl)	mg/L	-	-	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050
Uranium, total (T-U)	mg/L	-	-	0.000262	0.000518	0.000228	0.000438	0.00036	0.00254
Vanadium, total (T-V)	mg/L	0.005	-	0.00136	0.00182	0.00095	0.00114	0.00131	0.00147
Zinc, total (T-Zn)	mg/L	0.01	0.055	<0.0030	<0.0030	<0.0030	<0.0030	<0.0030	<0.0030
Hexavalent Chromium, total	mg/L	0.0015	-	<0.00150	<0.00150	<0.00150	<0.00150	<0.00150	<0.00150
Dissolved Metals									
Cadmium, dissolved (D-Cd)	mg/L	-	-	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	0.000081
Copper, dissolved (D-Cu)	mg/L	-	-	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050
Iron, dissolved (D-Fe)	mg/L	-	-	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010
Lead, dissolved (D-Pb)	mg/L	-	-	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010
Manganese, dissolved (D-Mn)	mg/L	-	-	0.00948	0.00947	0.00921	0.00932	0.00961	0.0051
Nickel, dissolved (D-Ni)	mg/L	-	-	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050
Strontium, dissolved (D-Sr)	mg/L	-	-	0.528	1.12	0.474	0.596	0.725	6.72
Vanadium, dissolved (D-V)	mg/L	-	-	<0.00050	0.00054	<0.00050	<0.00050	<0.00050	0.00139
Zinc, dissolved (D-Zn)	mg/L	-	-	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	0.0011
Polycyclic Aromatic Hydrocarbons (PAHs)									
Acenaphthene	mg/L	0.006	-	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010
Acridine	mg/L	-	-	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010
Anthracene	mg/L	-	-	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010
Benz(a)anthracene	mg/L	-	-	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010
Benzo(a)pyrene	mg/L	0.00001	-	<0.0000050	<0.0000050	<0.0000050	<0.0000050	<0.0000050	<0.0000050
Chrysene	mg/L	0.0001	-	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010
Fluoranthene	mg/L	-	-	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010
Fluorene	mg/L	0.012	-	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010
1-methylnaphthalene	mg/L	0.001	-	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010
2-methylnaphthalene	mg/L	0.001	-	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010
Naphthalene	mg/L	0.001	-	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050
Phenanthrene	mg/L	-	-	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020
Pyrene	mg/L	-	-	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010
Quinoline	mg/L	-	-	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050
Volatile Organic Compounds (VOCs)									
Benzene	mg/L	0.11	-	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050
Ethylbenzene	mg/L	0.25	-	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050
Methyl-tert-butyl-ether	mg/L	5	0.44	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050
Styrene	mg/L	-	-	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050
Toluene	mg/L	0.215	-	<0.00040	<0.00040	<0.00040	<0.00040	<0.00040	<0.00040
Total Xylenes	mg/L	-	-	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050
Chlorobenzene	mg/L	0.025	-	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050
1,2-Dichlorobenzene	mg/L	0.042	-	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050

Notes:
Results ***underlined in bold italics*** exceed the applicable long-term water quality guideline for the protection of marine water aquatic life.
Shaded results exceed the applicable short-term water quality guideline for the protection of marine water aquatic life.
[1] The lowest applicable guidelines from approved or working BC WQGs, Canadian (CCME) WQGs and Federal WQGs.
[2] Induced guidelines for change from background conditions arising from discharges to the aquatic environment. Salinity WQG was not evaluated. The water quality data presented in the table were collected when the site was discharging for < 24 hours, therefore the turbidity and TSS short-term WQGs were evaluated. Background conditions at each depth (0.5 and 2 m below surface and 2 m above the seafloor) were established using reference station WQR2 collected September 15 (Table F-3).
[3] The approved total ammonia nitrogen BC WQG is salinity, pH and temperature dependent; see Tables 26E and 26F in BC WQG guidance document.
[4] The working BC WQG for trivalent antimony [SB(III)] is 0.27 mg/L and is applied to total antimony results.
[5] When MeHg ≤ 0.5% of total Hg, BC WQG = 0.00002 mg/L. The Canadian WQG = 0.000016 mg/L.

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

Parameter	Unit	Lowest Applicable Guideline [1]		Reference Station WQR1			Reference Station WQR2		
				0.5 m Below Surface	2 m Below Surface	2 m Above Seafloor	0.5 m Below Surface	2 m Below Surface	2 m Above Seafloor
				WQR1-0.5	WQR1-2m	WQR1-SF	WQR2-0.5	WQR2-2m	WQR2-SF
				VA25C4028-007	VA25C4028-008	VA25C4028-009	VA25C4124-007	VA25C4124-008	VA25C4124-009
		Long Term	Short Term	2025-09-13 8:50	2025-09-13 8:35	2025-09-13 8:10	2025-09-15 14:45	2025-09-15 14:25	2025-09-15 14:05
General Parameters									
pH - Field	pH units	7.0 - 8.7	-	7.86	7.87	7.42	7.65	7.90	7.47
Specific Conductivity - Field	µS/cm	-	-	17546	27946	46492	6117	6728	46191
Temperature - Field	℃	-	-	16.0	16.2	9.9	13.6	13.7	10.1
Salinity - Field	ppt	Narrative [2]	-	10.39	17.25	30	3.35	3.71	29.8
Turbidity - Field	NTU	Narrative [2]	Narrative [2]	4.42	4.15	1.62	13.84	10.51	1.29
TSS	mg/L	Narrative [2]	Narrative [2]	6.3	5.3	<2.0	11.1	12.3	2.4
Dissolved Oxygen - Field	mg/L	>=8	-	9.87	9.51	***5.3***	10	10.46	10.1
Total Hardness	mg/L	-	-	852	2020	5560	618	821	6360
Dissolved Hardness	mg/L	-	-	999	2390	6080	624	662	6300
Anions and Nutrients									
Sulphate	mg/L	-	-	333	820	1830	208	218	2340
Chloride	mg/L	-	-	2430	5840	13000	1870	1960	16600
Fluoride	mg/L	-	1.5	<1.0	<1.0	<1.0	<1.0	<1.0	1.1
Ammonia (N-NH_3)	mg/L	2.2-8.7 [3]	15-58 [3]	0.0102	0.0111	0.0147	0.0106	0.0107	0.0091
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	0.51	<0.50	<0.50	0.53
Total Organic Carbon (TOC)	mg/L	-	-	0.51	0.7	0.93	<0.50	0.76	0.89
Dissolved Organic Carbon (DOC)	mg/L	-	-	0.5	0.76	1.25	0.66	0.56	1.17
Total Metals									
Aluminum, total (T-Al)	mg/L	-	-	0.206	0.12	0.0264	0.485	0.262	0.0269
Antimony, total (T-Sb)	mg/L	-	0.27 [4]	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010
Arsenic, total (T-As)	mg/L	0.0125	0.0125	<0.00040	0.00058	0.00155	<0.00040	<0.00040	0.00156
Barium, total (T-Ba)	mg/L	-	-	0.0219	0.0211	0.0105	0.0234	0.0204	0.0116
Beryllium, total (T-Be)	mg/L	0.1	-	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050
Boron, total (T-B)	mg/L	1.2	-	0.63	***1.24***	***2.75***	0.55	0.59	***3.82***
Cadmium, total (T-Cd)	mg/L	0.00012	-	<0.000020	0.000026	0.00008	<0.000020	<0.000020	0.000074
Chromium, total (T-Cr)	mg/L	-	-	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050
Cobalt, total (T-Co)	mg/L	-	-	0.000129	0.000116	0.000102	0.000204	0.00014	0.000093
Copper, total (T-Cu)	mg/L	0.002	0.003	0.00091	0.00078	0.00052	0.00122	0.00093	0.00061
Iron, total (T-Fe)	mg/L	-	-	0.184	0.107	0.031	0.384	0.226	0.023
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	-	-	0.017	0.0126	0.00602	0.0195	0.0155	0.00577
Molybdenum, total (T-Mo)	mg/L	-	-	0.00184	0.00368	0.00971	0.00116	0.00142	0.00947
Nickel, total (T-Ni)	mg/L	0.0083	-	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050
Selenium, total (T-Se)	mg/L	0.002	-	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050
Silver, total (T-Ag)	mg/L	0.0005	0.0037	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010
Thallium, total (T-Tl)	mg/L	-	-	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050
Uranium, total (T-U)	mg/L	-	-	0.000466	0.001	0.00254	0.000312	0.00041	0.00258
Vanadium, total (T-V)	mg/L	0.005	-	0.00101	0.00099	0.0015	0.00133	0.00095	0.0014
Zinc, total (T-Zn)	mg/L	0.01	0.055	<0.0030	<0.0030	<0.0030	<0.0030	<0.0030	<0.0030
Hexavalent Chromium, total	mg/L	0.0015	-	<0.00150	<0.00150	<0.00150	<0.00150	<0.00150	<0.00150
Dissolved Metals									
Cadmium, dissolved (D-Cd)	mg/L	-	-	0.000021	0.000032	0.000083	<0.000020	<0.000020	0.000072
Copper, dissolved (D-Cu)	mg/L	-	-	<0.00050	0.00067	0.00079	<0.00050	<0.00050	0.00063
Iron, dissolved (D-Fe)	mg/L	-	-	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010
Lead, dissolved (D-Pb)	mg/L	-	-	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010
Manganese, dissolved (D-Mn)	mg/L	-	-	0.0117	0.0102	0.00689	0.00988	0.01	0.00561
Nickel, dissolved (D-Ni)	mg/L	-	-	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	0.00054
Strontium, dissolved (D-Sr)	mg/L	-	-	1.1	2.64	6.38	0.722	0.765	6.59
Vanadium, dissolved (D-V)	mg/L	-	-	0.00054	0.00081	0.00136	<0.00050	0.00052	0.00137
Zinc, dissolved (D-Zn)	mg/L	-	-	0.0011	0.002	0.0019	<0.0010	0.0016	0.0012
Polycyclic Aromatic Hydrocarbons (PAHs)									
Acenaphthene	mg/L	0.006	-	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010
Acridine	mg/L	-	-	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010
Anthracene	mg/L	-	-	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010
Benz(a)anthracene	mg/L	-	-	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010
Benzo(a)pyrene	mg/L	0.00001	-	<0.0000050	<0.0000050	<0.0000050	<0.0000050	<0.0000050	<0.0000050
Chrysene	mg/L	0.0001	-	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010
Fluoranthene	mg/L	-	-	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010
Fluorene	mg/L	0.012	-	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010
1-methylnaphthalene	mg/L	0.001	-	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010
2-methylnaphthalene	mg/L	0.001	-	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010
Naphthalene	mg/L	0.001	-	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050
Phenanthrene	mg/L	-	-	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020
Pyrene	mg/L	-	-	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010
Quinoline	mg/L	-	-	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050
Volatile Organic Compounds (VOCs)									
Benzene	mg/L	0.11	-	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050
Ethylbenzene	mg/L	0.25	-	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050
Methyl-tert-butyl-ether	mg/L	5	0.44	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050
Styrene	mg/L	-	-	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050
Toluene	mg/L	0.215	-	<0.00040	<0.00040	<0.00040	<0.00040	<0.00040	<0.00040
Total Xylenes	mg/L	-	-	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050
Chlorobenzene	mg/L	0.025	-	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050
1,2-Dichlorobenzene	mg/L	0.042	-	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050

Notes:
Results ***underlined in bold italics*** exceed the applicable long-term water quality guideline for the protection of marine water aquatic life.
Shaded results exceed the applicable short-term water quality guideline for the protection of marine water aquatic life.
[1] The lowest applicable guidelines from approved or working BC WQGs, Canadian (CCME) WQGs and Federal WQGs.
[2] 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 are marine reference stations and represent background conditions, therefore the turbidity and TSS WQGs were not evaluated.
[3] The approved total ammonia nitrogen BC WQG is salinity, pH and temperature dependent; see Tables 26E and 26F in BC WQG guidance document.
[4] The working BC WQG for trivalent antimony [SB(III)] is 0.27 mg/L and is applied to total antimony results.
[5] When MeHg ⩽ 0.5% of total Hg, BC WQG = 0.00002 mg/L. The Canadian WQG = 0.000016 mg/L.

Table F-4:
Marine Water Methylmercury and Corresponding Total Mercury Results Received at the Time of Reporting.

Parameter					**Total Methylmercury**	**Total Mercury**
Unit					**µg/L**	**µg/L**
Lowest Applicable Guideline[1]					0.0001 [2]	0.013-0.019 [3,4]
Station	**Position in Water Column**	**Sample ID**	**Lab ID**	**Sampling Date**		
Station IDZ-E1						
IDZ-E1	0.5 m Below Surface	IDZ-E1-0.5	VA25C4028-001	2025-09-12	0.000038	<0.0050
IDZ-E1	2 m Below Surface	IDZ-E1-2m	VA25C4028-002	2025-09-12	0.000035	<0.0050
IDZ-E1	2 m Above Seafloor	IDZ-E1-SF	VA25C4028-003	2025-09-12	0.000024	<0.0050
Station IDZ-E2						
IDZ-E2	0.5 m Below Surface	IDZ-E2-0.5	VA25C4028-004	2025-09-12	0.000029	<0.0050
IDZ-E2	2 m Below Surface	IDZ-E2-2m	VA25C4028-005	2025-09-12	0.000028	<0.0050
IDZ-E2	2 m Above Seafloor	IDZ-E2-SF	VA25C4028-006	2025-09-12	<0.000020	<0.0050
Station IDZ-W1						
IDZ-W1	0.5 m Below Surface	IDZ-W1-0.5	VA25C4124-001	2025-09-15	0.000027	<0.0050
IDZ-W1	2 m Below Surface	IDZ-W1-2m	VA25C4124-002	2025-09-15	0.000023	<0.0050
IDZ-W1	2 m Above Seafloor	IDZ-W1-SF	VA25C4124-003	2025-09-15	0.000027	<0.0050
Station IDZ-W2						
IDZ-W2	0.5 m Below Surface	IDZ-W2-0.5	VA25C4124-004	2025-09-15	0.000028	<0.0050
IDZ-W2	2 m Below Surface	IDZ-W2-2m	VA25C4124-005	2025-09-15	0.000026	<0.0050
IDZ-W2	2 m Above Seafloor	IDZ-W2-SF	VA25C4124-006	2025-09-15	0.000023	<0.0050
Reference Station WQR1						
WQR1	0.5 m Below Surface	WQR1-0.5	VA25C4028-007	2025-09-13	<0.000020	<0.0050
WQR1	2 m Below Surface	WQR1-2m	VA25C4028-008	2025-09-13	0.000020	<0.0050
WQR1	2 m Above Seafloor	WQR1-SF	VA25C4028-009	2025-09-13	<0.000020	<0.0050
Reference Station WQR2						
WQR2	0.5 m Below Surface	WQR2-0.5	VA25C4124-007	2025-09-15	0.000024	<0.0050
WQR2	2 m Below Surface	WQR2-2m	VA25C4124-008	2025-09-15	<0.000020	<0.0050
WQR2	2 m Above Seafloor	WQR2-SF	VA25C4124-009	2025-09-15	<0.000020	<0.0050

Notes:
Results ***underlined in bold italics*** exceed the applicable long-term water quality guideline for the protection of marine aquatic life.
[1] The lowest applicable guidelines from approved or working BC WQGs, Canadian (CCME) WQGs and Federal WQGs.
[2] From BC Ambient Water Quality Guidelines for Mercury Overview Report. The methylmercury concentration threshold of 0.0001 µg/L (0.1 ng/L) is indicated as a WQG for the protection of wildlife and is set at a concentration that protects fish from mercury bioaccumulation to a level that may harm wildlife that consume fish.
[3] CCME guideline for total mercury = 0.016 µg/L.
[4] When MeHg ≤ 0.5% of total Hg, BC WQG = 0.02 µg/L. When MeHg > 0.5% of total Hg, BC WQG = 0.0001/(MeHg/Total Hg). Detection limit values are used to calculate the WQG for result reported as not detected. Non-detect results are screened using the detection limit value.

Table F-5:
Marine Water Dioxin and Furan Toxicity Equivalency Quantity (TEQ) Results Received at the Time of Reporting.

Parameter					**Lower Bound PCDD/F TEQ**	**Upper Bound PCDD/F TEQ**
Unit					**pg/L**	**pg/L**
Station	**Position in Water Column**	**Sample ID**	**Lab ID**	**Sampling Date**		
Station IDZ-E1						
IDZ-E1	0.5 m Below Surface	IDZ-E1-0.5	VA25C4032-001	2025-09-12	0	0.993
IDZ-E1	2 m Below Surface	IDZ-E1-2m	VA25C4032-002	2025-09-12	0.00218	0.952
IDZ-E1	2 m Above Seafloor	IDZ-E1-SF	VA25C4032-003	2025-09-12	0.00438	0.904
Station IDZ-E2						
IDZ-E2	0.5 m Below Surface	IDZ-E2-0.5	VA25C4032-004	2025-09-12	0.00178	0.988
IDZ-E2	2 m Below Surface	IDZ-E2-2m	VA25C4032-005	2025-09-12	0.00831	1.01
IDZ-E2	2 m Above Seafloor	IDZ-E2-SF	VA25C4032-006	2025-09-12	0.00242	0.926
Station IDZ-W1						
IDZ-W1	0.5 m Below Surface	IDZ-W1-0.5	VA25C4127-001	2025-09-15	0	1.26
IDZ-W1	2 m Below Surface	IDZ-W1-2m	VA25C4127-002	2025-09-15	0.000951	1.17
IDZ-W1	2 m Above Seafloor	IDZ-W1-SF	VA25C4127-003	2025-09-15	0	1.07
Station IDZ-W2						
IDZ-W2	0.5 m Below Surface	IDZ-W2-0.5	VA25C4127-004	2025-09-15	0.00151	1.22
IDZ-W2	2 m Below Surface	IDZ-W2-2m	VA25C4127-005	2025-09-15	0.00140	1.10
IDZ-W2	2 m Above Seafloor	IDZ-W2-SF	VA25C4127-006	2025-09-15	0.00130	1.34
Reference Station WQR1						
WQR1	0.5 m Below Surface	WQR1-0.5	VA25C4032-007	2025-09-13	0.00248	1.02
WQR1	2 m Below Surface	WQR1-2m	VA25C4032-008	2025-09-13	0	1.02
WQR1	2 m Above Seafloor	WQR1-SF	VA25C4032-009	2025-09-13	0.00216	0.971
Reference Station WQR2						
WQR2	0.5 m Below Surface	WQR2-0.5	VA25C4127-007	2025-09-15	0.00127	1.10
WQR2	2 m Below Surface	WQR2-2m	VA25C4127-008	2025-09-15	0.00115	1.01
WQR2	2 m Above Seafloor	WQR2-SF	VA25C4127-009	2025-09-15	0	1.12

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.