TECHNICAL MEMORANDUM

To:	**Ian McAllister, Ashleigh Crompton, Mike Champion, Mark Zan and Ryan Schucroft (Woodfibre LNG)**	**Date: 12 Dec 2025**	
From:	**Holly Pelletier, Cheng Kuang and Patrick Mueller (Lorax)**	**Project #:**	**A633-9**
Subject:	**PE-111578 Weekly Discharge and Compliance Report #93 for November 30 - December 6**		

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 #93) was prepared by Lorax and summarizes WDA monitoring conducted for the period of November 30 - December 6. 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 #93 has been prepared to meet the requirements specified in Condition 4.2 of PE-111578:

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

Site layout and water management figures and site images are included in Appendix A. Monitoring results are tabulated in Appendix B through Appendix G for contact water, 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. The lower reach of East Creek was temporarily diverted to Outfall 11 (OUT-11), from September 17, 2024, to November 18, 2025, to facilitate replacement of the Outfall 12 culvert. As of November 19, 2025, East Creek flows have been restored to the lower channel that discharges to Howe Sound through Outfall 12 (OUT-12). To facilitate the reconstruction of the culvert at station OUT-01, non-contact water at the inlet to the culvert at OUT-01 has been temporarily diverted by pumping to station OUT-02 starting on October 12, 2025.

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 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) at the West Sedimentation Pond is used to clarify all non-contaminated contact water prior to re-use at site or discharge at SP-W-OUT. Water collected in the East Sediment Pond is periodically transferred to the West Sedimentation Pond to allow treatment by the 2700GPM system. 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. Treatment trains 1, 2, 3 and 4 have been commissioned, and commissioning of treatment trains 5 and 6 was underway during the monitoring period.

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 November 30 - December 6 monitoring period, with precipitation recorded each day except on November 30. The total precipitation amount during the monitoring period was 34.4 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
2025-11-30	0	8.0	1.4	Overcast
2025-12-01	3.0	4.8	2.5	Overcast
2025-12-02	0.6	8.8	3.4	Overcast
2025-12-03	1.8	5.8	4.1	Overcast
2025-12-04	5.2	5.9	4.6	Scattered Showers
2025-12-05	16	5.5	4.7	Rain
2025-12-06	7.8	10.2	5.0	Scattered Showers

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

From November 30 - December 6, the East Sedimentation Pond received water from the Area 1100 Sump and recirculated effluent from the East WWTP (Appendix A, Figure 2). There was no discharge to Howe Sound from station SP-E-OUT during the monitoring period. A total of 488 m^3 from the East Sedimentation Pond was transferred to the West Sedimentation Pond from November 30 - December 6 (Appendix B, Table B-5).

Routine operation of the East WWTP continued during the monitoring period (November 30 - December 6). Concrete contact water and water from the Wash Bay and Hydrovac Pit was periodically directed to the East WWTP for treatment, as well as water stored in the East Sedimentation Pond (Appendix A, Figure 2 and Figure 3). East WWTP treated effluent was discharged to the East Sedimentation Pond each day during the monitoring period (November 30 - December 6) except on December 2 and 3 when the East WWTP was not operated. Daily water volumes processed by the East WWTP are provided in Appendix B (Table B-5).

From November 30 - December 6, the West Sedimentation Pond received water from the Area 4100 and Area 4200 Sumps, the East Sedimentation Pond as well as recirculated effluent from the 2700GPM TSS settling system (Appendix A, Figure 3). West Sedimentation Pond effluent was clarified through the 2700GPM system on November 30 and December 5 and 6 and either recirculated back to the pond or intermittently discharged to Howe Sound. A total of 941 m^3 of clarified effluent was intermittently discharged to Howe Sound from station SP-W-OUT on November 30 and December 5 and 6. Clarified effluent was not reclaimed for construction use. Daily clarified effluent volumes from the 2700GPM TSS settling system that were recirculated to the West Sedimentation Pond, discharged to Howe Sound, or reclaimed for construction use are provided in Appendix C (Table C-5).

2. Monitoring Summary

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

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

- Non-contact diversion ditch outlet monitoring stations (OUT-01, OUT-02). Non-contact diversion ditch water at OUT-01 has been temporarily redirected to OUT-02 since October 12, 2025, to facilitate the reconstruction of the outfall at OUT-01. Station OUT-01 is not routinely monitored while the diversion is in place except during significant rainfall events, when non-contact water intermittently flows through the outfall (*e.g.*, October 26, 2025).
- Non-contact diversion ditch outlet monitoring stations OUT-06 and OUT-11.
- Creek water monitoring stations for Woodfibre, Mill and East Creek (SW-01, SW-02, SW-03, SW-04, SW-07).

- Contact water monitoring locations (SP-E-IN, WWTP-E-IN, COMB-WWTP-E-IN, WWTP-E-OUT, SP-W-IN, 2700GPM-IN, and 2700GPM-OUT).
- Supplementary contact water stations at the outlet of each sampling train. These samples are identified as W2700T#-OUT (with # equal to the train number).
- Effluent compliance stations (SP-E-OUT and SP-W-OUT). As described in Section 1.1, when there is surplus water, West Sedimentation Pond clarified effluent from the individual 2700GPM trains is directed to SP-W-OUT for discharge. Since September 26, 2025 SP-W-OUT has been sampled from the discharge manhole. It is planned to install a manifold that will combine effluent from the individual trains into a single discharge line configured with a sampling port for SP-W-OUT sample collection. The manifold supplies are currently being procured, and installation will proceed once all required supplies are received.
- 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 line from all six individual treatment trains when clarified effluent is directed to the West Sedimentation Pond and is approximately 10 m from the location of 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, 2025, a manifold is being implemented that combines effluent from the individual trains into a single discharge line configured with a new SP-W-OUT sampling port.

Water quality was monitored at stations OUT-02, SW-01, SW-02, SW-03, SW-04, SW-07, IDZ-W1, IDZ-W2, WQR2, SP-E-IN, WWTP-E-IN, WWTP-E-OUT, SP-W-IN, SP-W-OUT, 2700GPM-IN, W2700T1-OUT, W2700T2-OUT, and W2700T5-OUT during the monitoring period (November 30 - December 6). Sampling dates and parameters tested are summarized in Table 2.

Overall, the PE-111578 monitoring requirements that were applicable during the monitoring period (November 30 - December 6) 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. Monthly monitoring requirements specified in PE-111578 were met for the month of November and the fall high-frequency monitoring (5-in-30) for receiving environment stations was completed.

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 (November 30 - December 6). Daily field measurements were not collected at the west catchment compliance station (SP-W-OUT) from December 1 through December 4 as there was no discharge to Howe Sound on those days nor on November 30 as there was no discharge at the time of monitoring.

Daily field parameters were not collected at the influent and effluent stations of the East WWTP (WWTP-E-IN and WWTP-E-OUT, respectively) from December 1 through December 4 as it was not operational at the time of monitoring on those days. Daily field parameters and a weekly analytical sample were not collected at the influent and effluent stations of the West WWTP (WWTP-W-IN and WWTP- W- OUT, respectively) as it was not operational during the monitoring period (November 30 - December 6).

Table 2:
Summary of PE-111578 Monitoring Samples Collected November 30 - December 6.

Sampling Date	Sample	Description	Parameters Tested	Monitoring Frequency
November 30, 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
December 1, 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
December 2, 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
December 3, 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
	SW-02	Lower Reach of Mill Creek (upstream of the third bridge)	Field, Physical & General Parameters, VH & BTEX, EPHs & PAHs, Total, Dissolved and Speciated Metals, VOCs, Methylmercury, Dioxins & Furans.	M
	SW-03	Mill Creek Estuary		
	SW-07	Upstream Mill Creek (at the diversion inlet)		
December 4, 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
	SW-01	Lower Reach of Woodfibre Creek (near the mouth)	Field, Physical & General Parameters, VH & BTEX, EPHs & PAHs, Total, Dissolved and Speciated Metals, VOCs, Methylmercury, Dioxins & Furans.	M
	SW-04	Lower Reach of East Creek (near the outlet to the outfall culvert)		
December 5, 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, Physical & General Parameters, VH & BTEX, EPHs & PAHs, Total, Dissolved and Speciated Metals, VOCs, Methylmercury, Dioxins & Furans.	D, M, M_2, W
	SP-W-OUT	West Sedimentation Pond clarified effluent discharge to Howe Sound, collected at the manifold that combines effluent from the individual 2700GPM trains into a single discharge line configured with a new SP-W-OUT sampling port	Field, Physical & General Parameters, VH & BTEX, EPHs & PAHs, Total, Dissolved and Speciated Metals, VOCs, Methylmercury, Dioxins & Furans.	D, M, 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
	W2700T1-OUT	2700GPM TSS settling system at the outlet of Train 1	Field, Physical & General Parameters, Total, Dissolved and Speciated Metals, and Methylmercury.	P
	W2700T2-OUT	2700GPM TSS settling system at the outlet of Train 2		
	W2700T5-OUT	2700GPM TSS settling system at the outlet of Train 5		
December 6, 2025	SP-E-IN	East Sedimentation Pond influent monitored at cell 1 of the pond	Field, Physical & General Parameters, Total, Dissolved and Speciated Metals, and Methylmercury.	D, M_2, W
	WWTP-E-IN	East WWTP at the influent meter box	Field, Physical & General Parameters, Total, Dissolved and Speciated Metals, and Methylmercury.	D, M_2, W
	WWTP-E-OUT	East WWTP at the effluent meter box		
	SP-W-IN	West Sedimentation Pond influent monitored at cell 1 of the pond	Field Parameters.	D
	SP-W-OUT	West Sedimentation Pond clarified effluent discharge to Howe Sound, collected at the manifold that combines effluent from the individual 2700GPM trains into a single discharge line configured with a new SP-W-OUT sampling port	Field Parameters.	D
	2700GPM-IN	2700GPM TSS settling system at the influent meter box	Field Parameters.	P
	OUT-02	Non-contact water diversion ditch outlet	Field, Physical & General Parameters, Total and Dissolved Metals, and Methylmercury.	M
	IDZ-W1-0.5	Howe Sound IDZ station W1; 0.5 m below surface	Field, Physical & General Parameters, VH & BTEX, EPHs & PAHs, Total, Dissolved and Speciated Metals, VOCs, Methylmercury, Dioxins & Furans.	M
	IDZ-W1-2m	Howe Sound IDZ station W1; 2 m below surface		
	IDZ-W1-SF	Howe Sound IDZ station W1; 2 m above the seafloor		
	IDZ-W2-0.5	Howe Sound IDZ station W2; 0.5 m below surface		
	IDZ-W2-2m	Howe Sound IDZ station W2; 2 m below surface		
	IDZ-W2-SF	Howe Sound IDZ station W2; 2 m above the seafloor		
	WQR2-0.5	Reference site 2; 0.5 m below surface		
	WQR2-2m	Reference site 2; 2 m below surface		
	WQR2-SF	Reference site 2; 2 m above the seafloor		

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.
M_5 – fall high-frequency (5-in-30) sampling for receiving environment stations.
W – weekly monitoring for metals, chromium speciation and methylmercury at WWTP and sedimentation pond influent and effluent stations, effective June 25, 2025.
P – periodic monitoring for targeted parameters that is supplementary to PE-111578 requirements.

3. Water Quality Results

3.1 Summary of Reported Results

Analytical results and associated field measurements included in this weekly report (Report #93) are listed below in Table 3, with additional field measurements presented in Table B-4 (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:

- OUT-01, OUT-02 and OUT-06 collected November 6 (total mercury, methylmercury);
- IDZ-W1, IDZ-W2 and WQR2 collected November 7 (total mercury, methylmercury);
- SW-02, SW-03 and SW-07 collected November 9 (total mercury, methylmercury);
- OUT-01, OUT-02 and OUT-06 collected November 10 (total mercury, methylmercury);
- IDZ-W1, IDZ-W2 and WQR2 collected November 11 (dioxins and furans);
- SW-01 and SW-04 collected November 13 (total mercury, methylmercury, dioxins and furans);
- 2700GPM-IN and SP-W-OUT collected November 16 (dioxins and furans);
- OUT-01, OUT-02 and OUT-06 collected November 17 (total mercury, methylmercury);
- OUT-01, OUT-02 and OUT-06 collected November 22 (total mercury, methylmercury);
- SP-W-OUT and 2700GPM-IN collected November 25 (dioxins and furans, acute toxicity (SP-W-OUT only));
- IDZ-E1, IDZ-E2, IDZ-W1, IDZ-W2, WQR1 and WQR2 collected November 25 at 0.5 m below surface (field and all analytical parameters, chronic toxicity);
- SP-E-IN, WWTP-E-IN and WWTP-E-OUT collected November 28 (dioxins and furans);
- SW-02, SW-03 and SW-07 collected December 3 (field and all analytical parameters);
- SW-01 and SW-04 collected December 4 (field and all analytical parameters);
- SP-W-IN, SP-W-OUT and 2700GPM-IN collected December 5 (total mercury, methylmercury, dioxins and furans);
- W2700T1-OUT, W2700T2-OUT and W2700T5-OUT collected December 5 (total mercury, methylmercury);
- SP-E-IN, WWTP-E-IN and WWTP-E-OUT collected December 6 (all analytical parameters);
- OUT-02 collected December 6 (field and all analytical parameters);
- IDZ-W1, IDZ-W2 and WQR2 collected December 6 (field and all analytical parameters).

Table 3:
Summary of Analytical Results and Associated Field Measurements Included in Weekly Discharge and Compliance Report #93.

Sample	Description	Sampling Date	Parameters Reported
IDZ-W1-0.5	Howe Sound IDZ station W1; 0.5 m below surface	November 1, 2025	Methylmercury.
IDZ-W1-2m	Howe Sound IDZ station W1; 2 m below surface		
IDZ-W1-SF	Howe Sound IDZ station W1; 2 m above the seafloor		
IDZ-W2-0.5	Howe Sound IDZ station W2; 0.5 m below surface		
IDZ-W2-2m	Howe Sound IDZ station W2; 2 m below surface		
IDZ-W2-SF	Howe Sound IDZ station W2; 2 m above the seafloor		
WQR2-0.5	Reference site 2; 0.5 m below surface		
WQR2-2m	Reference site 2; 2 m below surface		
WQR2-SF	Reference site 2; 2 m above the seafloor		
IDZ-E1-0.5	Howe Sound IDZ station E1; 0.5 m below surface	November 2, 2025	Methylmercury.
IDZ-E1-2m	Howe Sound IDZ station E1; 2 m below surface		
IDZ-E1-SF	Howe Sound IDZ station E1; 2 m above the seafloor		
IDZ-E2-0.5	Howe Sound IDZ station E2; 0.5 m below surface		
IDZ-E2-2m	Howe Sound IDZ station E2; 2 m below surface		
IDZ-E2-SF	Howe Sound IDZ station E2; 2 m above the seafloor		
WQR1-0.5	Reference site 1; 0.5 m below surface		
WQR1-2m	Reference site 1; 2 m below surface		
WQR1-SF	Reference site 1; 2 m above the seafloor		
OUT-01	Non-contact water diversion ditch outlet		
OUT-02	Non-contact water diversion ditch outlet		
OUT-06	Non-contact water diversion ditch outlet		
IDZ-W1-0.5	Howe Sound IDZ station W1; 0.5 m below surface	November 7, 2025	Dioxins and Furans
IDZ-W1-2m	Howe Sound IDZ station W1; 2 m below surface		
IDZ-W1-SF	Howe Sound IDZ station W1; 2 m above the seafloor		
IDZ-W2-0.5	Howe Sound IDZ station W2; 0.5 m below surface		
IDZ-W2-2m	Howe Sound IDZ station W2; 2 m below surface		
IDZ-W2-SF	Howe Sound IDZ station W2; 2 m above the seafloor		
WQR2-0.5	Reference site 2; 0.5 m below surface		
WQR2-2m	Reference site 2; 2 m below surface		
WQR2-SF	Reference site 2; 2 m above the seafloor		
SW-02	Lower Reach of Mill Creek (upstream of the third bridge)	November 9, 2025	Dioxins and Furans
SW-03	Mill Creek Estuary		
SW-07	Upstream Mill Creek (at the diversion inlet)		
SP-W-IN	West Sedimentation Pond influent monitored at cell 1 of the pond	November 10, 2025	Dioxins and Furans
SP-W-OUT	West Sedimentation Pond clarified effluent discharge to Howe Sound, collected at the manifold that combines effluent from the individual 2700GPM trains into a single discharge line configured with a new SP-W-OUT sampling port		
2700GPM-IN	2700GPM TSS settling system at the influent meter box		
OUT-01	Non-contact water diversion ditch outlet	November 22, 2025	Field, Physical and General Parameters, Total and Dissolved Metals.
OUT-02	Non-contact water diversion ditch outlet		
OUT-06	Non-contact water diversion ditch outlet		
SP-E-IN	East Sedimentation Pond influent monitored at cell 1 of the pond	November 28, 2025	Field, Physical and General Parameters, Total and Dissolved Metals, Hexavalent Chromium, VOCs, PAHs and Methylmercury.
WWTP-E-IN	East WWTP at the influent meter box		
WWTP-E-OUT	East WWTP at the effluent meter box		
SP-W-IN	West Sedimentation Pond influent monitored at cell 1 of the pond	December 5, 2025	Field, Physical and General Parameters, Total and Dissolved Metals, Hexavalent Chromium, VOCs, and PAHs.
SP-W-OUT	West Sedimentation Pond clarified effluent discharge to Howe Sound, collected at the manifold that combines effluent from the individual 2700GPM trains into a single discharge line configured with a new SP-W-OUT sampling port		
2700GPM-IN	2700GPM TSS settling system at the influent meter box		
W2700T1-OUT	2700GPM TSS settling system at the outlet of Train 1		Field, Physical and General Parameters, Total and Dissolved Metals, and Hexavalent Chromium.
W2700T2-OUT	2700GPM TSS settling system at the outlet of Train 2		
W2700T5-OUT	2700GPM TSS settling system at the outlet of Train 5		

3.2 Screening and Reporting Overview

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

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

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

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

calculated assuming a concentration equal to the detection limit for results reported as not detected. These two parameters span the range of possible TEQs if one or more of the PCDDs and PCDFs are reported as not detected.

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

A summary of reported and pending results is provided in Section 3.1. Results for effluents from East WWTP, 2700GPM TSS settling system, and East and West Sedimentation Ponds are discussed in Section 3.2 and Section 3.4. The water quality monitored at non-contact water diversion ditch outlets and in the receiving environment is described in Section 3.5 to Section 0. Sediment samples are collected annually at stations IDZ-E-SED and IDZ-W-SED and are discussed in Section 3.7 when they are reported. Sediment samples were last collected July 2025 and the analytical results were presented in Report #82.

3.3 East Catchment

The east catchment water quality and flow monitoring results for stations at the East WWTP, the East Sedimentation Pond, and the authorized discharge location (SP-E-OUT) are discussed in this section and are tabulated in Appendix B.

Results are presented for field measurements of influent quality for the East Sedimentation Pond and East WWTP influent and effluent quality collected November 30 - December 6 as well as analytical results for samples collected November 28 (stations SP-E-IN, WWTP-E-IN and WWTP-E-OUT). Field measurements for the East WWTP effluent samples (WWTP-E-OUT) collected November 30 - December 6 and the analytical sample collected November 28 met MDOs except for hexavalent chromium (0.00875 mg/L) on November 28 and dissolved oxygen (7.50 mg/L) on November 30 (Appendix B, Table B-1, Table B-3 and Table B-4). Follow-up actions for hexavalent chromium are tracked in Table 5.

East WWTP effluent was directed to the East Sedimentation Pond and there was no discharge from the pond to Howe Sound from the SP-E-OUT authorized discharge location from November 30 - December 6 (Section 1.2; Table B-5 of Appendix B). Therefore, water quality samples and field measurements were not collected at this station during the monitoring period.

3.4 West Catchment

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

As discussed in Section 1.2, a total of 941 m^3 of clarified sedimentation pond effluent from the 2700GPM TSS Settling System was intermittently discharged to Howe Sound from SP-W-OUT during the monitoring period (November 30 - December 6).

Field measurements of influent and effluent quality for the West Sedimentation Pond and the 2700GPM TSS settling system collected November 30 - December 6 and analytical samples collected December 5 (stations SP-W-IN, SP-W-OUT, 2700GPM-IN, W2700T1-OUT, W2700T2-OUT and W2700T5-OUT) were available at the time of reporting (Appendix C, Table C-1 through Table C-5). Field measurements collected November 30 - December 6 and the December 5 SP-W-OUT effluent sample met PE-111578 discharge limits and WQGs.

3.5 Non-Contact Water Diversion Ditch Outlets

Analytical results were available at the time of reporting for the non-contact water diversion ditch outlet samples collected at stations OUT-01, OUT-02 and OUT-06 on November 22 (as discussed in Report #91). The analytical results, field parameters, and WQGs are summarized in Appendix D. Parameter concentrations met WQGs except total aluminum in all samples.

Total aluminum was above the long-term WQG in all samples collected November 22, ranging from 0.218 to 0.453 mg/L. The total aluminum concentrations exceeding WQGs are within the range of values observed during the pre-construction baseline monitoring of diversion ditch water quality except at OUT-06 on November 22 (Table 4).

The November 22 OUT-06 sample was collected during heavy rainfall (74.4 mm). The precipitation generated runoff flows from the slopes above the construction site. Elevated runoff flows typically entrain small particles that contribute to turbidity and total metal concentrations. Total aluminum was predominately present in the particulate-bound form of the metal and is attributed to particulates from non-contact water background sources. Therefore, these results are considered to represent background conditions for non-contact water.

The methylmercury result for the non-contact water diversion ditch outlet sample collected at stations OUT-01, OUT-02 and OUT-06 on November 2 (as discussed in Report #89) were available at the time of reporting. For all samples, methylmercury concentrations ranged from

0.000021 to 0.000053 µg/L and met the WQG. The corresponding total mercury results met WQGs. Results are tabulated in Appendix D, Table D-2.

Table 4:
Parameters Above the Pre-Construction Baseline Range and WQGs in Non-Contact Water Diversion Ditch Samples collected November 22 (Station OUT-06)

Parameter	Units	WQG	N	N >Baseline	Commentary
Total Aluminum	mg/L	0.183	1	1	Total aluminum measured at OUT-06 on November 22 (0.453 mg/L) was 2.5 times greater than the WQG and 1.05 times greater than the maximum concentration observed in the pre-construction baseline monitoring program (0.433 mg/L). It is speculated the total aluminum concentration is associated with heavy rainfall (74.4 mm on November 22) that increased suspended particulate concentrations in the non-contact water that likely contributed to higher total aluminum concentrations than those observed in the pre-construction baseline period. Therefore, these results are considered to represent background conditions for non-contact water.

N = number of samples.

3.6 Freshwater and Estuarine Water Receiving Environment

Dioxins and furans results were available at the time of reporting for freshwater and estuarine water samples collected at the Mill Creek estuary, mid-stream and background stations (SW-03, SW-02 and SW-07, respectively) on November 9 (as discussed in Report #90). The lower and upper bound PCDD/F TEQ concentrations measured in these samples ranged from 0 to 0.0178 pg/L and from 1.71 to 2.58 pg/L, respectively. The lower and upper bound PCDD/F TEQ concentrations were within the concentration ranges observed in the pre-construction baseline monitoring program or within ranges observed at background stations. Results are tabulated in Appendix E, Table E-1 and Appendix F, Table F-1.

3.7 Marine Water Receiving Environment

Methylmercury analytical results were available at the time of reporting for all marine samples collected November 1 (stations IDZ-W1, IDZ-W2 and WQR2) and November 2 (stations IDZ-E1, IDZ-E2 and WQR1), as discussed in Reports #88 and #89, respectively. For all samples, methylmercury concentrations ranged from <0.000020 to 0.000028 µg/L and met the WQG. The corresponding total mercury results met WQGs. Results are tabulated in Appendix G, Table G-1.

Dioxin and furans results were available at the time of reporting for all marine samples collected November 7 (stations IDZ-W1, IDZ-W2 and WQR2), as discussed in Report #89. For all samples, the lower bound PCDD/F TEQ concentrations ranged from 0 to 0.00227 pg/L and the upper bound PCDD/F TEQ concentrations ranged from 1.61 to 2.69 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 G, Table G-2.

3.8 Quality Control

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

Table 5:
Weekly Report QC Evaluations and Ongoing Items

QC Procedure	Observation	Investigation/Resolution
Reporting Period (November 30 - December 6, Report #93)		
Authorized Works and Monitoring Program Evaluation	The authorized works and monitoring stations have not been established as described in PE-111578.	The PE-111578 authorized works for water management have been constructed, except for some of the conveyance ditches, which require completion of site grading prior to installation. Sumps, pumps and hoses are used for temporary conveyance until the ditches are completed. The lower reach of East Creek was temporarily diverted through Outfall 11 from September 17, 2024 to November 18, 2025. As November 19, 2025, East Creek flows have been returned to the lower Channel that discharges to Howe Sound through the Outfall 12 culverts (OUT-12). The culvert at OUT-01 is being replaced and diversion water flows to OUT-01 have been redirected to OUT-02. All monitoring stations have been established except at SP-E-IN-1, SP-E-IN-2, SP-W-IN-1 and SP-W-IN-2 where substitute stations are established in lieu of those listed in PE-111578 (refer to Section 2). This item remains open.
Report #93: Potential Project Influence	Aluminum above the WQG and baseline ranges in non-contact water.	On November 22, at station OUT-06, the concentration of total aluminum (0.453 mg/L) was above WQG and the maximum concentration observed in non-contact ditches during pre-construction baseline monitoring. The November 22 OUT-06 sample was collected during significant rainfall (74.4 mm). The precipitation generated runoff flows from the slopes above the construction site. Elevated runoff flows typically entrain small particles that contribute to turbidity and total metal concentrations. Total aluminum was predominately present in the particulate-bound form of the metal and is attributed to particulates from background sources. Therefore, these results are considered to represent background conditions for non-contact water. This item is closed.
Report #93: WWTP Performance Evaluation	Hexavalent chromium above the MDO.	The total hexavalent chromium concentration was 0.00875 mg/L in the sample collected at WWTP-E-OUT on November 28 and was above the MDO (0.0015 mg/L). The WWTP treatment performance for total hexavalent chromium is being reviewed. This item remains open.
Report #93: Pending Data	Analytical results not reported.	Field parameters and analytical results for receiving environment and non-contact water diversion ditch outlet samples collected December 3, 4 and 6 and analytical results for contact and treated water samples collected December 6, as well as total mercury, methylmercury, dioxins and furans results for contact and treated water samples collected December 5 are pending and will be included in future weekly reports when available. This item remains open.
Ongoing Items from Previous Weekly Reports		
Report #62: WWTP Performance Evaluation	Total copper above the MDO.	The treatment effectiveness for total copper has been inconsistent from January to October. Several modifications to the treatment process have been implemented in 2025 to improve total copper 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. The total copper concentration in the WWTP-E-OUT sample collected October 17 (0.00474 mg/L) was above the MDO. Samples collected on September 27, October 4, 22 and 30 as well as November 6, 9, 22 and 28 met the MDO for copper. The WWTP effluent has consistently met the MDO for total copper from October 22 through November 28, therefore this item is considered to be resolved and is closed.
Report #89: Pending Data	Analytical results not reported.	Total mercury and methylmercury results for non-contact water diversion ditch outlet samples collected November 6 and receiving environment samples collected November 7 are pending and will be included in future weekly reports when available. This item remains open.
Report #90: Potential Project Influence	Total iron above WQG and baseline range in East Creek.	Total iron measured in East Creek (SW-04) on October 12 and 17 (0.350 and 0.342 mg/L) were 1.2 and 1.1 times greater than the WQG, respectively, and both 1.3 times greater than the maximum concentration observed in the pre-construction baseline monitoring program (0.273 mg/L). There were no LNG facility construction activities in the vicinity of East Creek on October 12 and 17, therefore the slightly elevated total iron in these samples is likely to have originated from upstream sources outside the LNG facility construction area. This item is closed.
Report #90: Pending Data	Analytical results not reported.	Total mercury and methylmercury results for receiving environment samples collected November 9 and 13 and for non-contact water diversion ditch outlet samples collected November 10 as well as dioxins and furans results for receiving environment samples collected November 11 and 13 are pending and will be included in future weekly reports when available. This item remains open.
Report #91: Pending Data	Analytical results not reported.	Total mercury and methylmercury results for non-contact water diversion ditch outlet samples collected November 17 and 22 as well as dioxins and furans results for contact and treated water samples collected November 16 are pending and will be included in future weekly reports when available. This item remains open.
Report #91: Data QC	Raised detection limit for methylmercury.	A raised detection limit for methylmercury (<0.000160 µg/L) was reported for the sample collected at IDZ-W2 at 0.5 m below surface due to sample matrix effects. A reanalysis has been requested with the laboratory to achieve the standard detection limit for methylmercury. This item remains open.
Report #92: Pending Data	Analytical results not reported.	Field parameters, analytical results and chronic toxicity results for receiving environment samples collected November 25, acute toxicity results for West sedimentation Pond clarified effluent as well as dioxins and furans results for contact and treated water samples collected November 25 and 28 are pending and will be included in future weekly reports when available. This item remains open.
Report #92: Data QC	Data QC	Raised detection limits were reported for all total metals for the Mill Creek Estuary (station SW-03) resulting in the raised detection limit for total copper (<0.00250 mg/L) above the long-term WQG (0.002 mg/L). A reanalysis has been requested with the laboratory to achieve a lower detection limit. 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.

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Appendix A:
Figures and Site Images

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:	Dec 11, 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 (December 6, 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

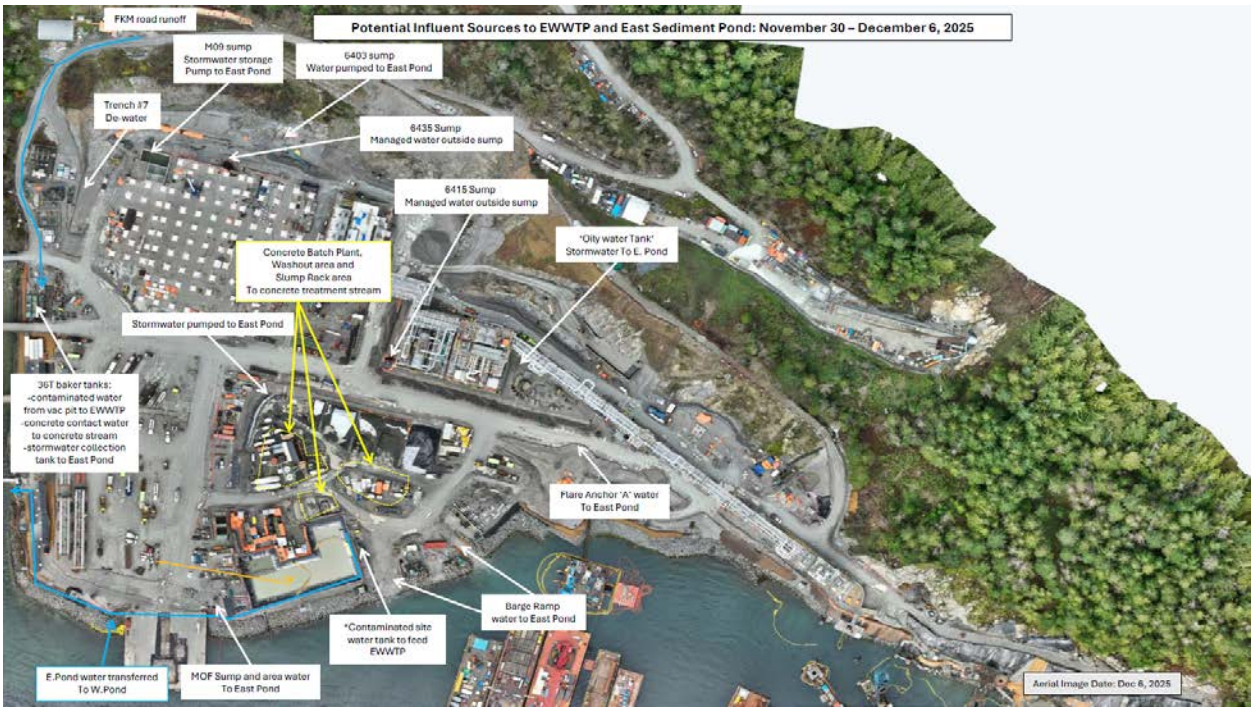

Figure 2: East Catchment contact water management facilities (November 30 - December 6).

Figure 3: West Catchment contact water management facilities (November 30 - December 6).

Figure 4: Aerial view of the East Sedimentation Pond (December 6, 2025). The East WWTP is located on the left side of the pond.

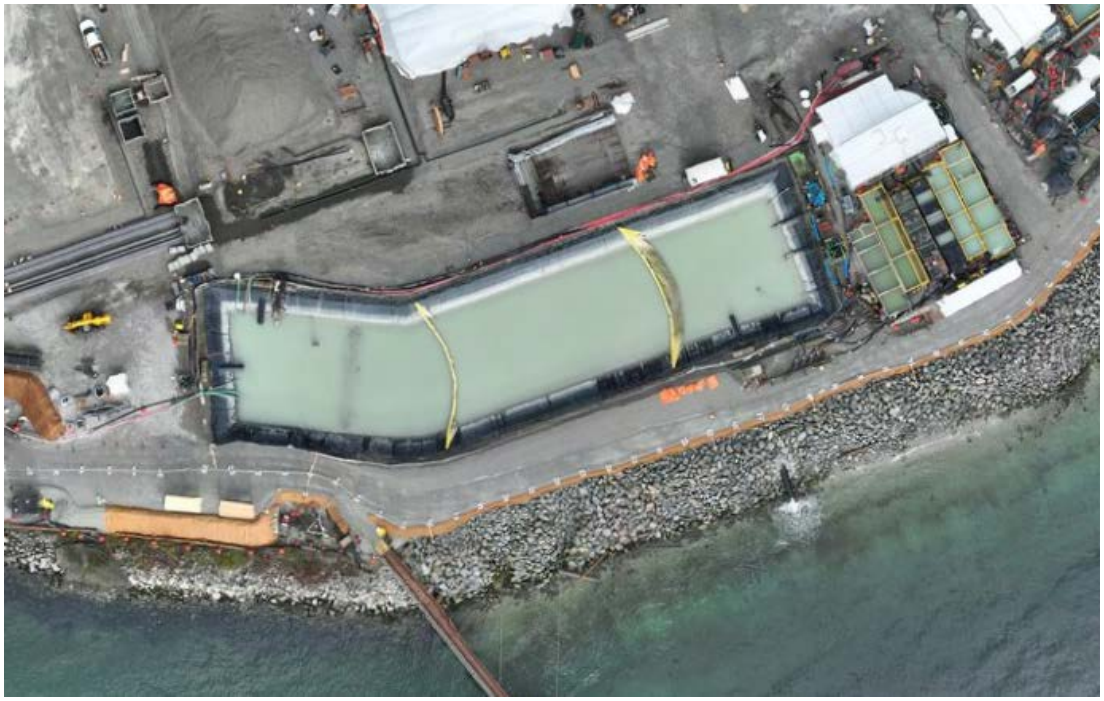

Figure 5: Aerial view of the West Sedimentation Pond (December 6, 2025).

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 Influent WWTP-E-IN VA25D1958-001 2025-11-28 10:11	Station WWTP-E-OUT Effluent WWTP-E-OUT VA25D1958-002 2025-11-28 15:58
		Long Term	Short Term			
General Parameters						
pH - Field	pH units	- [2]	-	5.5 - 9.0	7.4	6.27
Specific Conductivity - Field	µS/cm	-	-	-	450.7	984
Temperature - Field	°C	-	-	-	7.5	8.1
Salinity - Field	ppt	-	-	-	0.22	0.49
Turbidity - Field	NTU	-	-	-	96.31	3.62
TSS	mg/L	-	-	25 or 75 [6]	24	<3.0
Dissolved Oxygen - Field	mg/L	≥8	-	-	11.94	11.9
Total Hardness	mg/L	-	-	-	75.7	47.6
Dissolved Hardness	mg/L	-	-	-	69.7	52.7
Anions and Nutrients						
Sulphate	mg/L	-	-	-	97.2	378
Chloride	mg/L	-	-	-	10.3	11.8
Fluoride	mg/L	-	1.5	-	0.125	0.131
Ammonia (N-NH_3)	mg/L	12-29 [3]	78-191 [3]	-	<0.0050	0.0165
Nitrite (N-NO_2)	mg/L	-	-	-	0.0023	<0.0050
Nitrate (N-NO_3)	mg/L	3.7	339	-	0.257	0.537
Total Organic Carbon (TOC)	mg/L	-	-	-	2.71	1.61
Dissolved Organic Carbon (DOC)	mg/L	-	-	-	1.97	1.57
Total Metals						
Aluminum, total (T-Al)	mg/L	-	-	-	4.68	0.11
Antimony, total (T-Sb)	mg/L	-	0.27 [4]	-	0.00091	0.00096
Arsenic, total (T-As)	mg/L	0.0125	-	-	0.00227	0.00128
Barium, total (T-Ba)	mg/L	-	-	-	0.045	0.00343
Beryllium, total (T-Be)	mg/L	0.1	-	-	0.000075	<0.000020
Boron, total (T-B)	mg/L	1.2	-	-	0.04	0.035
Cadmium, total (T-Cd)	mg/L	0.00012	-	-	0.0000417	<0.0000400
Chromium, total (T-Cr)	mg/L	-	-	-	0.0025	0.00872
Cobalt, total (T-Co)	mg/L	-	-	-	0.00137	<0.00010
Copper, total (T-Cu)	mg/L	- [2]	- [2]	0.0043	0.00559	0.00121
Iron, total (T-Fe)	mg/L	-	-	-	3.96	0.013
Lead, total (T-Pb)	mg/L	- [2]	- [2]	0.0035	0.00206	<0.000050
Manganese, total (T-Mn)	mg/L	-	-	-	0.155	0.00653
Molybdenum, total (T-Mo)	mg/L	-	-	-	0.0236	0.153
Nickel, total (T-Ni)	mg/L	0.0083	-	-	0.00153	<0.00050
Selenium, total (T-Se)	mg/L	0.002	-	-	0.00012	0.000884
Silver, total (T-Ag)	mg/L	0.0005	0.0037	-	<0.000010	<0.000010
Thallium, total (T-Tl)	mg/L	-	-	-	0.000019	0.000021
Uranium, total (T-U)	mg/L	-	-	-	0.0124	0.0024
Vanadium, total (T-V)	mg/L	- [2]	-	0.0081	0.00816	0.00598
Zinc, total (T-Zn)	mg/L	- [2]	- [2]	0.0133	0.0208	<0.0030
Hexavalent Chromium, total	mg/L	0.0015	-	-	0.00086	***0.00875***
Dissolved Metals						
Cadmium, dissolved (D-Cd)	mg/L	-	-	-	<0.0000200	<0.0000350
Copper, dissolved (D-Cu)	mg/L	-	-	-	0.00159	0.00114
Iron, dissolved (D-Fe)	mg/L	-	-	-	0.044	<0.010
Lead, dissolved (D-Pb)	mg/L	-	-	-	<0.000050	<0.000050
Manganese, dissolved (D-Mn)	mg/L	-	-	-	0.0233	0.00661
Nickel, dissolved (D-Ni)	mg/L	-	-	-	0.00071	<0.00050
Strontium, dissolved (D-Sr)	mg/L	-	-	-	0.108	0.128
Vanadium, dissolved (D-V)	mg/L	-	-	-	0.00247	0.00616
Zinc, dissolved (D-Zn)	mg/L	-	-	-	0.0032	0.0029
Polycyclic Aromatic Hydrocarbons (PAHs)						
Acenaphthene	mg/L	0.006	-	-	<0.000010	<0.000010
Acridine	mg/L	-	-	-	<0.000010	<0.000010
Anthracene	mg/L	-	-	-	<0.000010	<0.000010
Benz(a)anthracene	mg/L	-	-	-	<0.000010	<0.000010
Benzo(a)pyrene	mg/L	0.00001	-	-	<0.0000050	<0.0000050
Chrysene	mg/L	0.0001	-	-	<0.000010	<0.000010
Fluoranthene	mg/L	-	-	-	<0.000010	<0.000010
Fluorene	mg/L	0.012	-	-	<0.000010	<0.000010
1-methylnaphthalene	mg/L	0.001	-	-	<0.000010	<0.000010
2-methylnaphthalene	mg/L	0.001	-	-	<0.000010	<0.000010
Naphthalene	mg/L	0.001	-	-	<0.000050	<0.000050
Phenanthrene	mg/L	-	-	-	<0.000020	<0.000020
Pyrene	mg/L	-	-	-	0.000011	<0.000010
Quinoline	mg/L	-	-	-	<0.000050	<0.000050
Volatile Organic Compounds (VOCs)						
Benzene	mg/L	0.11	-	-	<0.00050	<0.00050
Ethylbenzene	mg/L	0.25	-	-	<0.00050	<0.00050
Methyl-tert-butyl-ether	mg/L	5	0.44	-	<0.00050	<0.00050
Styrene	mg/L	-	-	-	<0.00050	<0.00050
Toluene	mg/L	0.215	-	-	<0.00040	<0.00040
Total Xylenes	mg/L	-	-	-	<0.00050	<0.00050
Chlorobenzene	mg/L	0.025	-	-	<0.00050	<0.00050
1,2-Dichlorobenzene	mg/L	0.042	-	-	<0.00050	<0.00050

Notes:
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 (November 30 - December 6).
[1] The lowest applicable guidelines from approved or working BC WQGs, Canadian (CCME) WQGs and Federal WQGs for marine waters.
[2] The WQG was not evaluated for parameters with discharge limits.
[3] The BC WQG for total ammonia is salinity, pH and temperature dependent; see Tables 27E and 27F in BC WQG guidance document.
[4] The working BC WQG for trivalent antimony [SB(III)] is 0.27 mg/L and is applied to total antimony results.
[5] When MeHg ≤0.5% of total Hg, the BC WQG = 0.00002 mg/L. The Canadian WQG = 0.000016 mg/L.
[6] The PE-111578 discharge limit for TSS is 25 mg/L under dry conditions and 75 mg/L for each day of Wet Conditions and for one day following the end of Wet Conditions.

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

Parameter	Unit	Lowest Applicable Guideline [1]		PE-111578 Discharge Limit	Station SP-E-IN Influent SP-E-IN VA25D1958-003 2025-11-28 16:16
		Long Term	Short Term		
General Parameters					
pH - Field	pH units	- [2]	-	5.5 - 9.0	7.53
Specific Conductivity - Field	µS/cm	-	-	-	600
Temperature - Field	°C	-	-	-	8.4
Salinity - Field	ppt	-	-	-	0.29
Turbidity - Field	NTU	-	-	-	472.45
TSS	mg/L	-	-	25 or 75 [6]	516
Dissolved Oxygen - Field	mg/L	≥8	-	-	11.35
Total Hardness	mg/L	-	-	-	149
Dissolved Hardness	mg/L	-	-	-	79.8
Anions and Nutrients					
Sulphate	mg/L	-	-	-	172
Chloride	mg/L	-	-	-	9.27
Fluoride	mg/L	-	1.5	-	0.144
Ammonia (N-NH_3)	mg/L	12 [3]	78 [3]	-	0.0098
Nitrite (N-NO_2)	mg/L	-	-	-	0.0028
Nitrate (N-NO_3)	mg/L	3.7	339	-	0.322
Total Organic Carbon (TOC)	mg/L	-	-	-	8.96
Dissolved Organic Carbon (DOC)	mg/L	-	-	-	2.87
Total Metals					
Aluminum, total (T-Al)	mg/L	-	-	-	31.6
Antimony, total (T-Sb)	mg/L	-	0.27 [4]	-	0.00119
Arsenic, total (T-As)	mg/L	0.0125	-	-	0.00883
Barium, total (T-Ba)	mg/L	-	-	-	0.253
Beryllium, total (T-Be)	mg/L	0.1	-	-	0.000515
Boron, total (T-B)	mg/L	1.2	-	-	<0.050
Cadmium, total (T-Cd)	mg/L	0.00012	-	-	***0.000515***
Chromium, total (T-Cr)	mg/L	-	-	-	0.0135
Cobalt, total (T-Co)	mg/L	-	-	-	0.00918
Copper, total (T-Cu)	mg/L	- [2]	- [2]	0.0043	0.0408
Iron, total (T-Fe)	mg/L	-	-	-	26.3
Lead, total (T-Pb)	mg/L	- [2]	- [2]	0.0035	0.0339
Manganese, total (T-Mn)	mg/L	-	-	-	0.911
Molybdenum, total (T-Mo)	mg/L	-	-	-	0.0628
Nickel, total (T-Ni)	mg/L	0.0083	-	-	0.00796
Selenium, total (T-Se)	mg/L	0.002	-	-	0.000336
Silver, total (T-Ag)	mg/L	0.0005	0.0037	-	0.000147
Thallium, total (T-Tl)	mg/L	-	-	-	0.000195
Uranium, total (T-U)	mg/L	-	-	-	0.0211
Vanadium, total (T-V)	mg/L	- [2]	-	0.0081	0.0453
Zinc, total (T-Zn)	mg/L	- [2]	- [2]	0.0133	0.127
Hexavalent Chromium, total	mg/L	0.0015	-	-	***0.00299***
Dissolved Metals					
Cadmium, dissolved (D-Cd)	mg/L	-	-	-	<0.0000250
Copper, dissolved (D-Cu)	mg/L	-	-	-	0.00195
Iron, dissolved (D-Fe)	mg/L	-	-	-	<0.010
Lead, dissolved (D-Pb)	mg/L	-	-	-	<0.000050
Manganese, dissolved (D-Mn)	mg/L	-	-	-	0.0281
Nickel, dissolved (D-Ni)	mg/L	-	-	-	<0.00050
Strontium, dissolved (D-Sr)	mg/L	-	-	-	0.174
Vanadium, dissolved (D-V)	mg/L	-	-	-	0.00367
Zinc, dissolved (D-Zn)	mg/L	-	-	-	<0.0010
Polycyclic Aromatic Hydrocarbons (PAHs)					
Acenaphthene	mg/L	0.006	-	-	<0.000010
Acridine	mg/L	-	-	-	<0.000010
Anthracene	mg/L	-	-	-	0.000015
Benz(a)anthracene	mg/L	-	-	-	0.000048
Benzo(a)pyrene	mg/L	0.00001	-	-	***0.0000638***
Chrysene	mg/L	0.0001	-	-	<0.000056
Fluoranthene	mg/L	-	-	-	0.000103
Fluorene	mg/L	0.012	-	-	<0.000010
1-methylnaphthalene	mg/L	0.001	-	-	<0.000010
2-methylnaphthalene	mg/L	0.001	-	-	<0.000010
Naphthalene	mg/L	0.001	-	-	<0.000050
Phenanthrene	mg/L	-	-	-	0.000047
Pyrene	mg/L	-	-	-	0.000109
Quinoline	mg/L	-	-	-	<0.000050
Volatile Organic Compounds (VOCs)					
Benzene	mg/L	0.11	-	-	<0.00050
Ethylbenzene	mg/L	0.25	-	-	<0.00050
Methyl-tert-butyl-ether	mg/L	5	0.44	-	<0.00050
Styrene	mg/L	-	-	-	<0.00050
Toluene	mg/L	0.215	-	-	<0.00040
Total Xylenes	mg/L	-	-	-	<0.00050
Chlorobenzene	mg/L	0.025	-	-	<0.00050
1,2-Dichlorobenzene	mg/L	0.042	-	-	<0.00050

Notes:
East catchment influents and effluents 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 (November 30 - December 6).
[1] The lowest applicable guidelines from approved or working BC WQGs, Canadian (CCME) WQGs and Federal WQGs for marine waters.
[2] The WQG was not evaluated for parameters with discharge limits.
[3] The BC WQG for total ammonia is salinity, pH and temperature dependent; see Tables 27E and 27F in BC WQG guidance document.
[4] The working BC WQG for trivalent antimony [SB(III)] is 0.27 mg/L and is applied to total antimony results.
[5] When MeHg ≤0.5% of total Hg, the BC WQG = 0.00002 mg/L. The Canadian WQG = 0.000016 mg/L.
[6] The PE-111578 discharge limit for TSS is 25 mg/L under dry conditions and 75 mg/L for each day of Wet Conditions and for one day following the end of Wet Conditions.

Table B-3:
East Catchment 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]	0.0075-0.013 [3,4]
Station	**Water Type**	**Sample ID**	**Lab ID**	**Sampling Date**		
Influent						
SP-E-IN	Influent	SP-E-IN	VA25D1958-003	2025-11-28	***0.000720***	***0.0721***
WWTP-E-IN	Influent	WWTP-E-IN	VA25D1958-001	2025-11-28	0.000083	0.00626
Effluent						
WWTP-E-OUT	Effluent	WWTP-E-OUT	VA25D1958-002	2025-11-28	<0.000020	0.00263

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

Table B-4:
East Catchment Field Measurements Collected During the Monitoring Period (November 30 - December 6).

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	2025-11-30 13:25	7.1	11.07	0.30	86.85	67.8	7.0	620	No
SP-E-IN	Influent	2025-12-01 13:07	6.1	10.90	0.27	31.65	26.6	7.9	555	No
SP-E-IN	Influent	2025-12-02 12:59	9.2	10.77	0.24	25.50	22.0	7.7	494	No
SP-E-IN	Influent	2025-12-03 12:23	7.2	10.18	0.22	16.16	15.1	8.1	458	No
SP-E-IN	Influent	2025-12-04 13:44	7.6	10.33	0.21	24.01	20.9	8.2	435	Yes
SP-E-IN	Influent	2025-12-05 16:02	7.8	11.27	0.24	168.42	128.6	7.6	505	No
SP-E-IN	Influent	2025-12-06 10:08	7.7	11.95	0.39	21.75	19.2	7.0	796	No
WWTP-E-IN	Influent	2025-11-30 15:25	5.9	11.28	0.23	93.82	73.0	7.6	475	No
WWTP-E-IN	Influent	2025-12-05 16:09	7.0	11.57	0.22	262.3	198.6	7.6	462	No
WWTP-E-IN	Influent	2025-12-06 10:45	8.0	11.14	0.34	277.57	210.0	6.9	688	No
Effluent [5]										
WWTP-E-OUT	Effluent	2025-11-30 15:37	6.2	***7.50***	0.43	0.38	3.3	6.2	877	No
WWTP-E-OUT	Effluent	2025-12-05 16:15	6.8	12.45	0.37	2.37	4.8	6.7	750	No
WWTP-E-OUT	Effluent	2025-12-06 16:34	7.9	12.03	0.55	2.64	5.0	6.6	1110	No

Notes:
The east catchment did not discharge to Howe Sound during the monitoring period (November 30 - December 6). 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. Daily field measurements for WWTP-E-IN were not collected December 1 – 4 as the East WWTP was not operational at the time of monitoring on those days.
[5] There was no discharge at the authorized discharge location (SP-E-OUT) during the monitoring period (November 30 - December 6), therefore daily field measurements for SP-E-OUT were not collected on those days. Daily field measurements for WWTP-E-OUT were not collected December 1 – 4 as the East WWTP was not operational at the time of monitoring on those days.
[6] The PE-111578 discharge limit for TSS is 25 mg/L under dry conditions and 75 mg/L for each day of Wet Conditions and for one day following the end of Wet Conditions.

Table B-5:
East Catchment Daily Discharge Volumes for the Monitoring Period (November 30 - December 6).

	East Sedimentation Pond Effluent	**Transfer to West Sedimentation Pond**	**East WWTP Treated Effluent (Station WWTP-E-OUT)[2]**	**Discharge to Howe Sound (Station SP-E-OUT)**
Units	**m^3**	**m^3**	**m^3**	**m^3**
PE-111578 Discharge Limit	-	-	1100	- [1]
Date				
2025-11-30	0	0	110	0
2025-12-01	0	0	18	0
2025-12-02	0	0	0	0
2025-12-03	0	0	0	0
2025-12-04	0	0	73	0
2025-12-05	0	0	211	0
2025-12-06	0	488	475	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-IN	Station W2700T1-OUT	Station W2700T2-OUT	Station W2700T5-OUT
					Influent	Effluent	Effluent	Effluent
					2700GPM-IN	W2700T1-OUT	W2700T2-OUT	W2700T5-OUT
					VA25D2656-002	VA25D2656-003	VA25D2656-004	VA25D2656-005
		Long Term	Short Term		2025-12-05 10:18	2025-12-05 12:12	2025-12-05 11:52	2025-12-05 11:31
General Parameters								
pH - Field	pH units	- [2]	-	5.5 - 9.0	8.1	7.9	8.0	8.0
Specific Conductivity - Field	µS/cm	-	-	-	3567	365	367	366
Temperature - Field	°C	-	-	-	6.3	6.3	6.5	6.4
Salinity - Field	ppt	-	-	-	0.18	0.18	0.18	0.18
Turbidity - Field	NTU	-	-	-	63.1	1.5	0.99	0.53
TSS	mg/L	-	-	25 or 75 [6]	70.3	<3.0	<3.0	<3.0
Dissolved Oxygen - Field	mg/L	≥8	-	-	12.44	14.16	13.28	12.65
Total Hardness	mg/L	-	-	-	92.4	79	78.7	80
Dissolved Hardness	mg/L	-	-	-	78.4	76.4	77.3	78.7
Anions and Nutrients								
Sulphate	mg/L	-	-	-	77.1	79.3	78.0	77.0
Chloride	mg/L	-	-	-	6.78	7.24	6.95	6.84
Fluoride	mg/L	-	1.5	-	0.102	0.102	0.104	0.103
Ammonia (N-NH_3)	mg/L	2.9-4.7 [3]	19-31 [3]	-	0.0078	0.0115	<0.0050	0.0059
Nitrite (N-NO_2)	mg/L	-	-	-	0.0246	0.0149	0.0225	0.0262
Nitrate (N-NO_3)	mg/L	3.7	339	-	0.369	0.359	0.376	0.372
Total Organic Carbon (TOC)	mg/L	-	-	-	3.18	1.68	1.75	1.87
Dissolved Organic Carbon (DOC)	mg/L	-	-	-	1.78	1.53	1.57	1.58
Total Metals								
Aluminum, total (T-Al)	mg/L	-	-	-	3.84	0.0425	0.0239	0.0255
Antimony, total (T-Sb)	mg/L	-	0.27 [4]	-	0.00082	0.00082	0.00081	0.00079
Arsenic, total (T-As)	mg/L	0.0125	-	-	0.00192	0.00139	0.00152	0.00145
Barium, total (T-Ba)	mg/L	-	-	-	0.0339	0.00291	0.00483	0.00460
Beryllium, total (T-Be)	mg/L	0.1	-	-	0.000063	<0.000020	<0.000020	<0.000020
Boron, total (T-B)	mg/L	1.2	-	-	0.012	<0.010	<0.010	<0.010
Cadmium, total (T-Cd)	mg/L	0.00012	-	-	0.0000262	<0.0000100	<0.0000100	<0.0000100
Chromium, total (T-Cr)	mg/L	-	-	-	0.00165	<0.00050	<0.00050	<0.00050
Cobalt, total (T-Co)	mg/L	-	-	-	0.0011	<0.00010	<0.00010	<0.00010
Copper, total (T-Cu)	mg/L	- [2]	- [2]	0.0043	0.00322	0.00074	0.0006	0.00075
Iron, total (T-Fe)	mg/L	-	-	-	3.15	0.019	<0.010	<0.010
Lead, total (T-Pb)	mg/L	- [2]	- [2]	0.0035	0.00202	0.000091	<0.000050	0.000080
Manganese, total (T-Mn)	mg/L	-	-	-	0.138	0.0277	0.0106	0.0195
Molybdenum, total (T-Mo)	mg/L	-	-	-	0.0206	0.0154	0.0187	0.0198
Nickel, total (T-Ni)	mg/L	0.0083	-	-	0.00087	<0.00050	<0.00050	<0.00050
Selenium, total (T-Se)	mg/L	0.002	-	-	0.000104	0.000091	0.000104	0.000089
Silver, total (T-Ag)	mg/L	0.0005	0.0037	-	<0.000010	<0.000010	<0.000010	<0.000010
Thallium, total (T-Tl)	mg/L	-	-	-	0.000024	0.000017	<0.000010	0.000012
Uranium, total (T-U)	mg/L	-	-	-	0.00989	0.00747	0.00935	0.00917
Vanadium, total (T-V)	mg/L	- [2]	-	0.0081	0.0056	<0.00050	0.00056	0.00071
Zinc, total (T-Zn)	mg/L	- [2]	- [2]	0.0133	0.0154	<0.0030	<0.0030	<0.0030
Hexavalent Chromium, total	mg/L	0.0015	-	-	<0.00050	<0.00050	<0.00050	<0.00050
Dissolved Metals								
Cadmium, dissolved (D-Cd)	mg/L	-	-	-	<0.0000100	<0.0000100	<0.0000100	<0.0000100
Copper, dissolved (D-Cu)	mg/L	-	-	-	0.00079	0.00067	0.00056	0.00070
Iron, dissolved (D-Fe)	mg/L	-	-	-	<0.010	<0.010	<0.010	<0.010
Lead, dissolved (D-Pb)	mg/L	-	-	-	<0.000050	0.000078	<0.000050	0.000053
Manganese, dissolved (D-Mn)	mg/L	-	-	-	0.0176	0.0262	0.0102	0.0191
Nickel, dissolved (D-Ni)	mg/L	-	-	-	<0.00050	<0.00050	<0.00050	<0.00050
Strontium, dissolved (D-Sr)	mg/L	-	-	-	0.103	0.0993	0.101	0.0991
Vanadium, dissolved (D-V)	mg/L	-	-	-	0.00083	<0.00050	0.00056	0.00070
Zinc, dissolved (D-Zn)	mg/L	-	-	-	<0.0010	<0.0010	<0.0010	<0.0010
Polycyclic Aromatic Hydrocarbons (PAHs)								
Acenaphthene	mg/L	0.006	-	-	<0.000010	-	-	-
Acridine	mg/L	-	-	-	<0.000010	-	-	-
Anthracene	mg/L	-	-	-	<0.000010	-	-	-
Benz(a)anthracene	mg/L	-	-	-	0.000022	-	-	-
Benzo(a)pyrene	mg/L	0.00001	-	-	***0.0000202***	-	-	-
Chrysene	mg/L	0.0001	-	-	0.000023	-	-	-
Fluoranthene	mg/L	-	-	-	0.000038	-	-	-
Fluorene	mg/L	0.012	-	-	<0.000010	-	-	-
1-methylnaphthalene	mg/L	0.001	-	-	<0.000010	-	-	-
2-methylnaphthalene	mg/L	0.001	-	-	<0.000010	-	-	-
Naphthalene	mg/L	0.001	-	-	<0.000050	-	-	-
Phenanthrene	mg/L	-	-	-	0.000024	-	-	-
Pyrene	mg/L	-	-	-	0.000038	-	-	-
Quinoline	mg/L	-	-	-	<0.000050	-	-	-
Volatile Organic Compounds (VOCs)								
Benzene	mg/L	0.11	-	-	<0.00050	-	-	-
Ethylbenzene	mg/L	0.25	-	-	<0.00050	-	-	-
Methyl-tert-butyl-ether	mg/L	5	0.44	-	<0.00050	-	-	-
Styrene	mg/L	-	-	-	<0.00050	-	-	-
Toluene	mg/L	0.215	-	-	<0.00040	-	-	-
Total Xylenes	mg/L	-	-	-	<0.00050	-	-	-
Chlorobenzene	mg/L	0.025	-	-	<0.00050	-	-	-
1,2-Dichlorobenzene	mg/L	0.042	-	-	<0.00050	-	-	-

Notes:
West catchment influents were not discharged to Howe Sound. Influent results above screening values are only highlighted for comparative purposes.
Non-detect results are screened using the detection limit value.
Results ***underlined in bold italics*** exceed the applicable long-term water quality guideline for the protection of marine water aquatic life.
Shaded results exceed the applicable short-term water quality guideline for the protection of marine water aquatic life.
Results in orange text exceed the PE-111578 West Sedimentation Pond Discharge Limit.
The West Catchment intermittently discharged during the monitoring period (November 30 - December 6) on November 30, December 5 and 6.
[1] The lowest applicable guidelines from approved or working BC WQGs, Canadian (CCME) WQGs and Federal WQGs for marine waters.
[2] The WQG was not evaluated for parameters with discharge limits.
[3] The BC WQG for total ammonia is salinity, pH and temperature dependent; see Tables 27E and 27F in BC WQG guidance document.
[4] The working BC WQG for trivalent antimony [SB(III)] is 0.27 mg/L and is applied to total antimony results.
[5] When MeHg ≤0.5% of total Hg, the BC WQG = 0.00002 mg/L. The Canadian WQG = 0.000016 mg/L.
[6] The PE-111578 discharge limit for TSS is 25 mg/L under dry conditions and 75 mg/L for each day of Wet Conditions and for one day following the end of Wet Conditions.

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

Parameter	Unit	Lowest Applicable Guideline [1]		PE-111578 Discharge Limit	Station SP-W-IN Influent SP-W-IN VA25D2656-001 2025-12-05 9:37	Station SP-W-OUT Effluent SP-W-OUT VA25D2656-006 2025-12-05 10:58	Station SP-W-OUT Effluent SP-W-OUT-DUP VA25D2656-007 2025-12-05 11:00
		Long Term	Short Term				
General Parameters							
pH - Field	pH units	- [2]	-	5.5 - 9.0	7.4	8.0	8.0
Specific Conductivity - Field	µS/cm	-	-	-	349	368	368
Temperature - Field	°C	-	-	-	6.4	6.3	6.3
Salinity - Field	ppt	-	-	-	0.17	0.18	0.18
Turbidity - Field	NTU	-	-	-	243.45	1.71	1.67
TSS	mg/L	-	-	25 or 75 [6]	261	<3.0	<3.0
Dissolved Oxygen - Field	mg/L	≥8	-	-	12.12	12.49	12.5
Total Hardness	mg/L	-	-	-	126	78.6	80.1
Dissolved Hardness	mg/L	-	-	-	80.2	79.6	76.9
Anions and Nutrients							
Sulphate	mg/L	-	-	-	72.7	77.7	78
Chloride	mg/L	-	-	-	6.57	6.9	6.93
Fluoride	mg/L	-	1.5	-	0.095	0.104	0.104
Ammonia (N-NH_3)	mg/L	2.9-12 [3]	19-78 [3]	-	0.0153	0.0055	<0.0050
Nitrite (N-NO_2)	mg/L	-	-	-	0.0209	0.0248	0.0249
Nitrate (N-NO_3)	mg/L	3.7	339	-	0.355	0.375	0.378
Total Organic Carbon (TOC)	mg/L	-	-	-	4.92	1.83	1.93
Dissolved Organic Carbon (DOC)	mg/L	-	-	-	1.88	1.62	1.74
Total Metals							
Aluminum, total (T-Al)	mg/L	-	-	-	15.5	0.0277	0.0267
Antimony, total (T-Sb)	mg/L	-	0.27 [4]	-	0.00087	0.00082	0.00082
Arsenic, total (T-As)	mg/L	0.0125	-	-	0.00298	0.00146	0.00147
Barium, total (T-Ba)	mg/L	-	-	-	0.119	0.00474	0.00477
Beryllium, total (T-Be)	mg/L	0.1	-	-	0.000238	<0.000020	<0.000020
Boron, total (T-B)	mg/L	1.2	-	-	0.014	<0.010	<0.010
Cadmium, total (T-Cd)	mg/L	0.00012	-	-	0.0000866	<0.0000100	<0.0000100
Chromium, total (T-Cr)	mg/L	-	-	-	0.00508	<0.00050	<0.00050
Cobalt, total (T-Co)	mg/L	-	-	-	0.00435	<0.00010	<0.00010
Copper, total (T-Cu)	mg/L	- [2]	- [2]	0.0043	0.00967	0.00178	0.00212
Iron, total (T-Fe)	mg/L	-	-	-	12.9	0.033	0.028
Lead, total (T-Pb)	mg/L	- [2]	- [2]	0.0035	0.00719	0.000253	0.000354
Manganese, total (T-Mn)	mg/L	-	-	-	0.521	0.017	0.0171
Molybdenum, total (T-Mo)	mg/L	-	-	-	0.0179	0.0194	0.0197
Nickel, total (T-Ni)	mg/L	0.0083	-	-	0.00277	<0.00050	<0.00050
Selenium, total (T-Se)	mg/L	0.002	-	-	0.000093	0.000084	0.000108
Silver, total (T-Ag)	mg/L	0.0005	0.0037	-	0.000025	<0.000010	<0.000010
Thallium, total (T-Tl)	mg/L	-	-	-	0.000059	0.000011	0.000011
Uranium, total (T-U)	mg/L	-	-	-	0.00853	0.00981	0.00925
Vanadium, total (T-V)	mg/L	- [2]	-	0.0081	0.0204	0.00065	0.00065
Zinc, total (T-Zn)	mg/L	- [2]	- [2]	0.0133	0.0578	0.0031	0.0046
Hexavalent Chromium, total	mg/L	0.0015	-	-	<0.00050	<0.00050	<0.00050
Dissolved Metals							
Cadmium, dissolved (D-Cd)	mg/L	-	-	-	<0.0000100	<0.0000100	<0.0000100
Copper, dissolved (D-Cu)	mg/L	-	-	-	0.00076	0.00083	0.00087
Iron, dissolved (D-Fe)	mg/L	-	-	-	<0.010	0.02	0.02
Lead, dissolved (D-Pb)	mg/L	-	-	-	<0.000050	<0.000050	<0.000050
Manganese, dissolved (D-Mn)	mg/L	-	-	-	0.0181	0.0155	0.0157
Nickel, dissolved (D-Ni)	mg/L	-	-	-	<0.00050	<0.00050	<0.00050
Strontium, dissolved (D-Sr)	mg/L	-	-	-	0.101	0.103	0.101
Vanadium, dissolved (D-V)	mg/L	-	-	-	0.00084	0.0006	0.00062
Zinc, dissolved (D-Zn)	mg/L	-	-	-	<0.0010	0.0012	0.0014
Polycyclic Aromatic Hydrocarbons (PAHs)							
Acenaphthene	mg/L	0.006	-	-	0.00001	<0.000010	<0.000010
Acridine	mg/L	-	-	-	<0.000010	<0.000010	<0.000010
Anthracene	mg/L	-	-	-	0.000021	<0.000010	<0.000010
Benz(a)anthracene	mg/L	-	-	-	0.000069	<0.000010	<0.000010
Benzo(a)pyrene	mg/L	0.00001	-	-	***0.0000657***	<0.0000050	<0.0000050
Chrysene	mg/L	0.0001	-	-	0.000062	<0.000010	<0.000010
Fluoranthene	mg/L	-	-	-	0.000129	<0.000010	<0.000010
Fluorene	mg/L	0.012	-	-	<0.000010	<0.000010	<0.000010
1-methylnaphthalene	mg/L	0.001	-	-	<0.000010	<0.000010	<0.000010
2-methylnaphthalene	mg/L	0.001	-	-	<0.000010	<0.000010	<0.000010
Naphthalene	mg/L	0.001	-	-	<0.000050	<0.000050	<0.000050
Phenanthrene	mg/L	-	-	-	0.00008	<0.000020	<0.000020
Pyrene	mg/L	-	-	-	0.00013	<0.000010	<0.000010
Quinoline	mg/L	-	-	-	<0.000050	<0.000050	<0.000050
Volatile Organic Compounds (VOCs)							
Benzene	mg/L	0.11	-	-	<0.00050	<0.00050	<0.00050
Ethylbenzene	mg/L	0.25	-	-	<0.00050	<0.00050	<0.00050
Methyl-tert-butyl-ether	mg/L	5	0.44	-	<0.00050	<0.00050	<0.00050
Styrene	mg/L	-	-	-	<0.00050	<0.00050	<0.00050
Toluene	mg/L	0.215	-	-	<0.00040	<0.00040	<0.00040
Total Xylenes	mg/L	-	-	-	<0.00050	<0.00050	<0.00050
Chlorobenzene	mg/L	0.025	-	-	<0.00050	<0.00050	<0.00050
1,2-Dichlorobenzene	mg/L	0.042	-	-	<0.00050	<0.00050	<0.00050

Notes:
West catchment influents were not discharged to Howe Sound. Influent results above screening values are only highlighted for comparative purposes.
Non-detect results are screened using the detection limit value.
Results ***underlined in bold italics*** exceed the applicable long-term water quality guideline for the protection of marine water aquatic life.
Shaded results exceed the applicable short-term water quality guideline for the protection of marine water aquatic life.
Results in orange text exceed the PE-111578 West Sedimentation Pond Discharge Limit.
The West Catchment intermittently discharged during the monitoring period (November 30 - December 6) on November 30, December 5 and 6.
[1] The lowest applicable guidelines from approved or working BC WQGs, Canadian (CCME) WQGs and Federal WQGs for marine waters.
[2] The WQG was not evaluated for parameters with discharge limits.
[3] The BC WQG for total ammonia is salinity, pH and temperature dependent; see Tables 27E and 27F in BC WQG guidance document.
[4] The working BC WQG for trivalent antimony [SB(III)] is 0.27 mg/L and is applied to total antimony results.
[5] When MeHg ≤0.5% of total Hg, the BC WQG = 0.00002 mg/L. The Canadian WQG = 0.000016 mg/L.
[6] The PE-111578 discharge limit for TSS is 25 mg/L under dry conditions and 75 mg/L for each day of Wet Conditions and for one day following the end of Wet Conditions.

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

Parameter					**Total Methylmercury**	**Total Mercury**
Unit					**µg/L**	**µg/L**
Lowest Applicable Guideline[1]					0.0001 [2]	0.0025-0.011 [3,4]
Station	**Water Type**	**Sample ID**	**Lab ID**	**Sampling Date**		
Influent						
SP-W-IN	Influent	SP-W-IN	VA25D1572-001	2025-11-25	0.000055	0.00599
2700GPM-IN	Influent	2700GPM-IN	VA25D1572-002	2025-11-25	0.000040	0.00187
Effluent						
SP-W-OUT	Effluent	SP-W-OUT	VA25D1572-004	2025-11-25	<0.000020	<0.00050
SP-W-OUT	Effluent	SP-W-OUT-DUP	VA25D1572-005	2025-11-25	<0.000020	0.00051
W2700T1-OUT	Effluent	W2700T1-OUT	VA25D1572-003	2025-11-25	<0.000020	0.00055

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

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

Parameter					**Lower Bound PCDD/F TEQ**	**Upper Bound PCDD/F TEQ**
Unit					**pg/L**	**pg/L**
Station	**Water Type**	**Sample ID**	**Lab ID**	**Sampling Date**		
Influent						
SP-W-IN	Influent	SP-W-IN	VA25D0089-001	2025-11-10	0.235	4.35
2700GPM-IN	Influent	2700GPM-IN	VA25D0089-002	2025-11-10	0.175	4.20
Effluent						
SP-W-OUT	Effluent	SP-W-OUT	VA25D0089-003	2025-11-10	0	2.86
SP-W-OUT	Effluent	SP-W-OUT-DUP	VA25D0089-004	2025-11-10	0	2.36

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

Table C-5:
West Catchment Field Measurements Collected During the Monitoring Period (November 30 - December 6).

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	2025-11-30 13:41	6.5	12.32	0.16	100.56	78.0	7.6	336	No
SP-W-IN	Influent	2025-12-01 12:46	5.4	12.31	0.15	65.96	52.2	8.5	315	No
SP-W-IN	Influent	2025-12-02 12:18	8.1	12.16	0.14	54.43	43.6	7.2	302	No
SP-W-IN	Influent	2025-12-03 12:46	6.2	11.65	0.21	48.68	39.3	7.3	441	No
SP-W-IN	Influent	2025-12-04 14:10	6.4	11.93	0.17	21.73	19.2	8.0	359	No
SP-W-IN	Influent	2025-12-05 9:37	6.4	12.12	0.17	243.45	184.6	7.4	349	No
SP-W-IN	Influent	2025-12-06 9:52	6.9	12.13	0.20	41.16	33.7	7.8	406	No
2700GPM-IN	Influent	2025-12-04 13:06	7.3	12.32	0.19	30.2	25.5	7.2	385	No
2700GPM-IN	Influent	2025-12-05 10:18	6.3	12.44	0.18	63.1	50.1	8.1	3567	No
2700GPM-IN	Influent	2025-12-06 9:47	7.0	12.07	0.2	43.61	35.5	7.7	410	No
Effluent [5]										
SP-W-OUT	Effluent	2025-12-05 10:58	6.3	12.49	0.18	1.71	4.3	8.0	368	No
SP-W-OUT	Effluent	2025-12-06 9:37	7.3	11.85	0.19	0.58	3.4	7.8	395	No

Notes:
West catchment influents for November 30 - December 6 were not discharged to Howe Sound. Results above screening values are only highlighted for comparative purposes.
Results ***underlined in bold italics*** exceed the applicable long-term water quality guideline for the protection of marine water aquatic life.
Shaded results exceed the applicable short-term water quality guideline for the protection of marine water aquatic life.
Results in orange text exceed the PE-111578 West Sedimentation Pond Discharge Limit.
[1] The lowest applicable guidelines from approved or working BC WQGs, Canadian (CCME) WQGs and Federal WQGs.
[2] The WQG was not evaluated for parameters with discharge limits.
[3] TSS concentration is estimated from field turbidity measurements using a site-specific relationship TSS = 0.7458 * [turbidity as NTU] + 3.
[4] Daily field measurements for station SP-W-IN were collected from cell 1 of the West Sedimentation Pond.
[5] As described in Section 1.1, when there is surplus water, West Sedimentation Pond clarified effluent from the individual 2700GPM trains is directed to SP-W-OUT for discharge. 2700GPM clarified effluent from Trains 2 and 5 was intermittently discharged to Howe Sound at the authorized discharge location (SP-W-OUT) during the monitoring period (November 30 - December 6) on November 30 and December 5 and 6. There was no discharge at the time of monitoring on November 30; therefore, daily field parameters were not collected at SP-W-OUT that day.
[6] The PE-111578 discharge limit for TSS is 25 mg/L under dry conditions and 75 mg/L for each day of Wet Conditions and for one day following the end of Wet Conditions.

Table C-6:
West Catchment Daily Discharge Volumes for the Monitoring Period (November 30 - December 6).

	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					
2025-11-30	0	326	0	0	198
2025-12-01	0	0	0	0	0
2025-12-02	0	0	0	0	0
2025-12-03	0	0	0	0	0
2025-12-04	0	1,260	0	0	0
2025-12-05	0	2,886	0	0	297
2025-12-06	0	2,739	0	0	446

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

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

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

Parameter	Unit	Lowest Applicable Guideline [1, 2]		Station OUT-01	Station OUT-02	Station OUT-06
				Non-contact Water Diversion Ditch Outlet	Non-contact Water Diversion Ditch Outlet	Non-contact Water Diversion Ditch Outlet
				OUT-01	OUT-02	OUT-06
				VA25D1286-001	VA25D1286-002	VA25D1286-003
		Long Term	Short Term	2025-11-22 9:40	2025-11-22 9:56	2025-11-22 11:17
General Parameters						
pH - Field	pH units	6.5 - 9.0	-	7.4	6.8	7.2
Specific Conductivity - Field	µS/cm	-	-	18	15	70
Temperature - Field	°C	-	-	8.9	8.8	9.2
Salinity - Field	ppt	-	-	0.01	0.01	0.03
Turbidity - Field	NTU	-	-	1.36	0.88	5.69
TSS	mg/L	-	-	<3.0	<3.0	<3.0
Dissolved Oxygen - Field	mg/L	>=8	>=5	11.35	11.51	10.92
Total Hardness	mg/L	-	-	6.28	4.55	28.1
Dissolved Hardness	mg/L	-	-	6.21	4.85	27.4
Anions and Nutrients						
Sulphate [2]	mg/L	128	-	1.48	1.39	2.89
Chloride	mg/L	120	600	0.57	0.59	0.6
Fluoride [2]	mg/L	-	0.400-0.824	<0.020	<0.020	<0.020
Ammonia ($N\text{-}NH_3$) [2]	mg/L	1.86-15.3	14.7-23.4	0.0055	<0.0050	<0.0050
Nitrite ($N\text{-}NO_2$) [2]	mg/L	0.0200	0.1	<0.0010	<0.0010	<0.0010
Nitrate ($N\text{-}NO_3$)	mg/L	3	32.8	0.0689	0.0605	0.201
Total Organic Carbon (TOC)	mg/L	-	-	5.52	5.86	6.13
Total Inorganic Carbon (DOC)	mg/L	-	-	5.26	5.56	5.84
Total Metals						
Aluminum, total (T-Al) [2]	mg/L	0.0832-0.548	-	***0.325***	***0.218***	***0.453***
Antimony, total (T-Sb)	mg/L	0.074	-	<0.00010	<0.00010	0.00026
Arsenic, total (T-As)	mg/L	0.005	-	0.00017	0.00012	0.00035
Barium, total (T-Ba)	mg/L	1	-	0.0047	0.00367	0.0103
Beryllium, total (T-Be)	mg/L	0.00013	-	<0.000020	<0.000020	<0.000020
Boron, total (T-B)	mg/L	1.2	29	<0.010	<0.010	0.011
Cadmium, total (T-Cd) [2]	mg/L	0.000036-0.000055	0.00011-0.00058	0.0000053	<0.0000050	0.000008
Chromium, total (T-Cr) [3]	mg/L	0.001	-	<0.00050	<0.00050	<0.00050
Cobalt, total (T-Co) [2]	mg/L	0.000389-0.000778	-	<0.00010	<0.00010	0.00012
Copper, total (T-Cu)	mg/L	-	-	0.00089	0.00058	0.00137
Iron, total (T-Fe)	mg/L	0.3	1	0.13	0.046	0.244
Lead, total (T-Pb)	mg/L	-	-	0.000172	0.000064	0.000513
Manganese, total (T-Mn) [2]	mg/L	0.768	0.816-0.850	0.00537	0.00225	0.0089
Molybdenum, total (T-Mo)	mg/L	0.00002	-	0.000268	0.000319	0.000864
Nickel, total (T-Ni) [2]	mg/L	0.073	46	<0.00050	<0.00050	<0.00050
Selenium, total (T-Se)	mg/L	0.0250	-	<0.000050	<0.000050	<0.000050
Silver, total (T-Ag)	mg/L	0.001	-	<0.000010	<0.000010	<0.000010
Thallium, total (T-Tl)	mg/L	0.00012	-	<0.000010	<0.000010	<0.000010
Uranium, total (T-U)	mg/L	0.0008	-	0.000064	0.000077	0.00016
Vanadium, total (T-V)	mg/L	0.0085	0.033	0.00062	<0.00050	0.00116
Zinc, total (T-Zn)	mg/L	0.12	-	<0.0030	<0.0030	<0.0030
Hexavalent Chromium, total	mg/L	-	-	-	-	-
Dissolved Metals						
Cadmium, dissolved (D-Cd) [2]	mg/L	0.000022-0.000083	0.000038-0.00016	<0.0000050	<0.0000050	0.0000052
Copper, dissolved (D-Cu) [2]	mg/L	0.000705-0.00256	0.00433-0.00664	0.00078	0.00058	0.00094
Iron, dissolved (D-Fe)	mg/L	-	0.35	0.035	0.032	0.027
Lead, dissolved (D-Pb) [2]	mg/L	0.00260-0.00766	-	0.00006	<0.000050	0.000095
Manganese, dissolved (D-Mn) [2]	mg/L	0.350-0.380	1.97-2.18	0.00194	0.00126	0.00128
Nickel, dissolved (D-Ni) [2]	mg/L	0.000900-0.00140	0.0155-0.0192	<0.00050	<0.00050	<0.00050
Strontium, dissolved (D-Sr)	mg/L	2.5	-	0.00891	0.00812	0.0396
Vanadium, dissolved (D-V)	mg/L	-	-	<0.00050	<0.00050	0.00064
Zinc, dissolved (D-Zn) [2]	mg/L	0.00470-0.0157	0.0112-0.0416	0.002	0.0011	0.001
Polycyclic Aromatic Hydrocarbons (PAHs)						
Acenaphthene	mg/L	0.0058	-	-	-	-
Acridine	mg/L	0.003	-	-	-	-
Anthracene	mg/L	0.000012	-	-	-	-
Benz(a)anthracene	mg/L	0.000018	-	-	-	-
Benzo(a)pyrene	mg/L	0.00001	-	-	-	-
Chrysene	mg/L	-	-	-	-	-
Fluoranthene	mg/L	0.00004	-	-	-	-
Fluorene	mg/L	0.003	-	-	-	-
1-methylnaphthalene	mg/L	-	-	-	-	-
2-methylnaphthalene	mg/L	-	-	-	-	-
Naphthalene	mg/L	0.001	0.001	-	-	-
Phenanthrene	mg/L	0.0003	-	-	-	-
Pyrene	mg/L	0.00002	-	-	-	-
Quinoline	mg/L	0.0034	-	-	-	-
Volatile Organic Compounds (VOCs)						
Benzene	mg/L	0.04	-	-	-	-
Ethylbenzene	mg/L	0.09	-	-	-	-
Methyl-tert-butyl-ether	mg/L	10	3.4	-	-	-
Styrene	mg/L	0.072	-	-	-	-
Toluene	mg/L	0.0005	-	-	-	-
Total Xylenes	mg/L	0.03	-	-	-	-
Chlorobenzene	mg/L	-	-	-	-	-
1,2-Dichlorobenzene	mg/L	-	-	-	-	-

Notes:
Non-detect results are screened using the detection limit value.
Results ***underlined in bold italics*** exceed the applicable long-term water quality guideline for the protection of freshwater aquatic life.
Shaded results exceed the applicable short-term water quality guideline for the protection of freshwater aquatic life.
[1] The lowest applicable guidelines from approved or working BC WQGs, Canadian (CCME) WQGs and Federal WQGs.
[2] BC WQG or CWQG indicated to be variable are calculated from sample-specific measurements for temperature, field pH, total hardness and dissolved organic carbon (DOC) content.
[3] The approved BC WQG for hexavalent chromium [Cr(VI)] is 0.001 mg/L and 0.0089 mg/L for trivalent chromium [Cr(III)]. The more conservative criteria for Cr(VI) is applied to total chromium results.
The lowest applicable guidelines are shown in the table; however, water quality data was screened to all applicable guidelines.

Table D-2:
Non-contact Water Diversion Ditch Outlet Methylmercury and Corresponding Total Mercury Results Received at the Time of Reporting.

Parameter					**Total Methylmercury**	**Total Mercury**
Unit					**µg/L**	**µg/L**
Lowest Applicable Guideline[1]					0.0001 [2]	0.0069-0.011 [3,4]
Station	**Description**	**Sample ID**	**Lab ID**	**Sampling Date**		
OUT-01	Non-Contact Water Diversion Ditch Outlet	OUT-01	VA25C9331-001	2025-11-02	0.000034	0.00388
OUT-02	Non-Contact Water Diversion Ditch Outlet	OUT-02	VA25C9331-002	2025-11-02	0.000053	0.00487
OUT-06	Non-Contact Water Diversion Ditch Outlet	OUT-06	VA25C9331-003	2025-11-02	0.000021	0.00145

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

Appendix E:
Freshwater Receiving Environment Results

Table E-1:
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-02	Lower Freshwater Reach of Mill Creek (upstream of the third bridge)	SW-02	VA25D0051-001	2025-11-09	0.00330	2.58
SW-07	Upstream Mill Creek (at the diversion inlet)	SW-07	VA25D0051-003	2025-11-09	0.0178	2.43

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:
Estuarine Water Receiving Environment Results

Table F-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	VA25D0051-002	2025-11-09	0	1.71

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 G:
Marine Water Receiving Environment Results

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

Parameter					**Total Methylmercury**	**Total Mercury**
Unit					**µg/L**	**µg/L**
Lowest Applicable Guideline[1]					0.0001 [2]	0.016-0.019 [3,4]
Station	**Position in Water Column**	**Sample ID**	**Lab ID**	**Sampling Date**		
Station IDZ-E1						
IDZ-E1	0.5 m Below Surface	IDZ-E1-0.5	VA25C9349-001	2025-11-02	0.000028	<0.0050
IDZ-E1	2 m Below Surface	IDZ-E1-2m	VA25C9349-002	2025-11-02	<0.000020	<0.0050
IDZ-E1	2 m Above Seafloor	IDZ-E1-SF	VA25C9349-003	2025-11-02	0.000023	<0.0050
Station IDZ-E2						
IDZ-E2	0.5 m Below Surface	IDZ-E2-0.5	VA25C9349-004	2025-11-02	0.000027	<0.0050
IDZ-E2	2 m Below Surface	IDZ-E2-2m	VA25C9349-005	2025-11-02	0.000026	<0.0050
IDZ-E2	2 m Above Seafloor	IDZ-E2-SF	VA25C9349-006	2025-11-02	0.000025	<0.0050
Station IDZ-W1						
IDZ-W1	0.5 m Below Surface	IDZ-W1-0.5	VA25C9311-001	2025-11-01	<0.000020	<0.0050
IDZ-W1	2 m Below Surface	IDZ-W1-2m	VA25C9311-002	2025-11-01	<0.000020	<0.0050
IDZ-W1	2 m Above Seafloor	IDZ-W1-SF	VA25C9311-003	2025-11-01	<0.000020	<0.0050
Station IDZ-W2						
IDZ-W2	0.5 m Below Surface	IDZ-W2-0.5	VA25C9311-004	2025-11-01	<0.000020	<0.0050
IDZ-W2	2 m Below Surface	IDZ-W2-2m	VA25C9311-005	2025-11-01	<0.000020	<0.0050
IDZ-W2	2 m Above Seafloor	IDZ-W2-SF	VA25C9311-006	2025-11-01	<0.000020	<0.0050
Reference Station WQR1						
WQR1	0.5 m Below Surface	WQR1-0.5	VA25C9349-007	2025-11-02	0.000028	<0.0050
WQR1	2 m Below Surface	WQR1-2m	VA25C9349-008	2025-11-02	0.000024	<0.0050
WQR1	2 m Above Seafloor	WQR1-SF	VA25C9349-009	2025-11-02	<0.000020	<0.0050
Reference Station WQR2						
WQR2	0.5 m Below Surface	WQR2-0.5	VA25C9311-007	2025-11-01	0.000028	<0.0050
WQR2	2 m Below Surface	WQR2-2m	VA25C9311-008	2025-11-01	<0.000020	<0.0050
WQR2	2 m Above Seafloor	WQR2-SF	VA25C9311-009	2025-11-01	<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 G-2:
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-W1						
IDZ-W1	0.5 m Below Surface	IDZ-W1-0.5	VA25C9956-001	2025-11-07	0	1.61
IDZ-W1	2 m Below Surface	IDZ-W1-2m	VA25C9956-002	2025-11-07	0	2.50
IDZ-W1	2 m Above Seafloor	IDZ-W1-SF	VA25C9956-003	2025-11-07	0.00227	2.42
Station IDZ-W2						
IDZ-W2	0.5 m Below Surface	IDZ-W2-0.5	VA25C9956-004	2025-11-07	0	2.54
IDZ-W2	2 m Below Surface	IDZ-W2-2m	VA25C9956-005	2025-11-07	0	2.43
IDZ-W2	2 m Above Seafloor	IDZ-W2-SF	VA25C9956-006	2025-11-07	0	2.69
Reference Station WQR2						
WQR2	0.5 m Below Surface	WQR2-0.5	VA25C9956-007	2025-11-07	0	2.36
WQR2	2 m Below Surface	WQR2-2m	VA25C9956-008	2025-11-07	0	2.34
WQR2	2 m Above Seafloor	WQR2-SF	VA25C9956-009	2025-11-07	0	2.32

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.