TECHNICAL MEMORANDUM

To:	**Ian McAllister, Ashleigh Crompton, Mike Champion, Mark Zan and Ryan Schucroft (Woodfibre LNG)**	**Date:**	**20 June 2025**
From:	**Holly Pelletier, Cheng Kuang and Patrick Mueller (Lorax)**	**Project #:**	**A633-9**
Subject:	**PE-111578 Weekly Discharge and Compliance Report #68 for June 8 – 14**		

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

This technical memorandum (Report #68) was prepared by Lorax Environmental and summarizes WDA monitoring conducted for the period of June 8 – 14. 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 #68 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 E for contact water and treated water samples.

1. Current Conditions

1.1 Water Management Infrastructure

The Construction Phase of the Woodfibre LNG Export Facility commenced in October 2023. Shoring works along the foreshore areas were initiated in December 2023, and in early 2024 construction of water management infrastructure commenced. 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. Discharge to Howe Sound from the East and West Sedimentation Ponds commenced April and October 2024, respectively.

The West WWTP was commissioned August and September 2024, but operation of the West WWTP was subsequently suspended September 25, 2024 for 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 previously approved 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 west catchment waters that require treatment are directed to the East WWTP.

Non-contact water 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 diverted around the east catchment along pre-existing road ditches that flow to East Creek or Mill Creek. To facilitate the replacement of the East Creek discharge culvert at OUT-12 (station SW-04), the lower reach of East Creek was temporarily diverted to an adjacent culvert, OUT-11, on September 17, 2024.

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

Flocculant-based TSS settling systems are used at the East and West Sedimentation Ponds to remove TSS from pond effluent. The first West Sedimentation Pond TSS settling system (ESC) was commissioned for use on September 25, 2024, with an 820 m^3/day installed capacity.

Additional TSS settling systems (W500GPM) was commissioned for use on November 28 and provides an additional 2,725 m^3/day installed capacity for clarifying water. A third TSS settling system (E500GPM) was commissioned for use at the East Sedimentation Pond on December 4, 2024, also with 2,725 m^3/day installed capacity.

Discharge from the East and West Sedimentation Ponds is controlled using pumps. Water stored in the ponds is pumped to a TSS settling system prior to discharge through the authorized outfall structures adjacent to each pond. Some of the TSS clarified water may be recirculated back to the ponds or re-used for construction (*e.g.*, dust suppression). Non-contaminated contact water stored in the East Sedimentation Pond is clarified through the E500GPM prior to re-use or discharge to Howe Sound at location SP-E-OUT. The west catchment discharge location, SP-W-OUT, receives the combined clarified effluents from the ESC and W500GPM TSS settling systems. Each of the authorized discharge locations (SP-E-OUT and SP-W-OUT) has an initial dilution zone (IDZ) where discharged water mixes with Howe Sound surface waters. The IDZ is defined in PE-111578 and extends in a 150 m radius from each point of discharge into Howe Sound.

Preparations underway for the next stages of construction will include upgrades to water management in the east and west catchments and consolidate the three TSS settling systems currently on site into a single high capacity system located adjacent to the West Sedimentation Pond. Commissioning of the planned system is scheduled to commence August 2025. The planned modifications will result in all non-contaminated contact water being clarified through the high capacity TSS settling system and discharged at SP-W-OUT.

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

Generally warm and sunny weather conditions were observed during the June 8 – 14 monitoring period, with no precipitation recorded. 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
2025-06-08	0	25.8	15.4	Mix of sun and cloud
2025-06-09	0	23	14.3	Mix of sun and cloud
2025-06-10	0	22.6	15.1	Mix of sun and cloud
2025-06-11	0	21	12	Mix of sun and cloud
2025-06-12	0	16.6	12.9	Mix of sun and cloud
2025-06-13	0	16.5	13	Mix of sun and cloud
2025-06-14	0	17.8	12.4	Mix of sun and cloud

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

From June 8 – 14, the East Sedimentation Pond received non-contaminated contact water from Area 1100 North Collection Sump and recirculated effluent from the East WWTP and E500GPM TSS settling system (Appendix A, Figure 2). Non-contaminated contact waters from the Upper Area 4100 Collection Sump were directed to the West Sedimentation Pond, as well as recirculated effluent from the W500GPM TSS settling system (Appendix A, Figure 3). During the monitoring period (June 8 – 14), a total of 1,015 m^3 of water from the East Sedimentation Pond was transferred to the West Sedimentation Pond (Appendix B, Table B-6).

Routine operation of the East WWTP continued during the monitoring period (June 8 – 14). Concrete contact waters were periodically directed to the East WWTP for treatment, as well as water stored in the East Sedimentation Pond (Appendix A, Figure 2 and Figure 3). East WWTP treated effluent was discharged to the East Sedimentation Pond each day during the monitoring period (June 8 – 14). The E500GPM TSS settling system was not operational and there was no discharge to Howe Sound via station SP-E-OUT during the monitoring period. The East Sedimentation Pond water level was drawn down June 8 - 10 to facilitate accumulated sediment removal on June 10 - 11. Daily water volumes processed by the East WWTP and the East TSS settling system (E500GPM) are provided in Appendix B (Table B-6).

West Sedimentation Pond effluent was clarified through the W500GPM system each day during the monitoring period (June 8 – 14) except June 10 when the system was not operated. Clarified effluent was recirculated to the West Sedimentation Pond or reclaimed and used for construction purposes (*e.g.*, road dust suppression, fill compaction, or hydrovac truck operation). The West ESC (150 GPM) TSS settling system was not operated. There was no discharge to Howe Sound via station SP-W-OUT during the monitoring period. From June 8 – 14, at total of 822 m^3 of clarified effluent was reclaimed for construction use. Daily clarified effluent volumes from the TSS settling systems, volumes discharged to Howe Sound and volumes of reclaimed water are provided in Appendix C (Table C-5).

2. Monitoring Summary

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

The following compliance and supplementary monitoring stations are currently being monitored:

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

- Contact water monitoring locations (SP-E-IN, E500GPM-IN, E500GPM-OUT, WWTP-E-IN, WWTP-E-OUT, SP-W-IN, ESC-W-IN, ESC-W-OUT, W500GPM-IN and W500GPM-OUT).
- Effluent compliance stations (SP-E-OUT and SP-W-OUT).
- Howe Sound reference and IDZ monitoring stations (WQR1, WQR2, IDZ-E1, IDZ-E2, IDZ-W1, and IDZ-W2).

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

Two flocculant-based TSS settling systems are used at the West Sedimentation Pond (ESC and W500GPM) as described in Section 1.1. Influent and effluent are monitored for each system at stations ESC-W-IN, ESC-W-OUT, W500GPM-IN and W500GPM-OUT. One TSS settling system (E500GPM) is used at the East Sedimentation Pond (Section 1.1). Influent and effluent are monitored at stations E500GPM-IN and E500GPM-OUT, respectively. The TSS settling system stations are supplemental to the PE-111578 monitoring requirements and are monitored at the discretion of field staff.

Water quality was monitored at stations IDZ-E1, IDZ-E2, IDZ-W1, IDZ-W2, WQR1, WWTP-E-IN, WWTP-E-OUT, SP-E-IN, SP-W-IN, W500GPM-IN, and W500GPM-OUT during the monitoring period (June 8 – 14). Sampling dates and parameters tested are summarized in Table 2.

Overall, the PE-111578 monitoring requirements that were applicable during the monitoring period (June 8 – 14) were met.

Daily field parameters and a weekly analytical sample were not collected at the east and west catchment effluent stations (SP-E-OUT and SP-W-OUT, respectively) as there was no discharge to Howe Sound during the monitoring period (June 8 – 14). Daily field parameters were not collected at the east catchment influent station (SP-E-IN) on June 10 and 11 as cell 1 of the East Sedimentation Pond was drained for sediment removal 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.

Table 2: Summary of PE-111578 Monitoring Samples Collected June 8 – 14.

Sampling Date	Sample	Description	Parameters Tested	Monitoring Frequency
June 8, 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
	W500GPM-IN	West 500 GPM TSS settling system at the influent meter box	Field Parameters.	P
	W500GPM-OUT	West 500 GPM TSS settling system at the effluent meter box		
June 9, 2025	SP-E-IN	East Sedimentation Pond 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, W_1, W_2
	WWTP-E-IN	East WWTP at the influent meter box	Field, Physical & General Parameters, VH & BTEX, EPHs & PAHs, Total, Dissolved and Speciated Metals, VOCs, Methylmercury, Dioxins & Furans.	D, W_1, W_2
	WWTP-E-OUT	East WWTP at the effluent meter box		
	SP-W-IN	West Sedimentation Pond influent monitored at cell 1 of the pond	Field Parameters.	D
	W500GPM-IN	West 500 GPM TSS settling system at the influent meter box	Field Parameters.	P
	W500GPM-OUT	West 500 GPM TSS settling system at the effluent meter box		
	IDZ-E1-0.5	Howe Sound IDZ station E1; 0.5 m below surface	Field, Physical & General Parameters, VH & BTEX, EPHs & PAHs, Total, Dissolved and Speciated Metals, VOCs, Methylmercury, Dioxins & Furans.	M
	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		
June 10, 2025	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
June 11, 2025	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
	W500GPM-IN	West 500 GPM TSS settling system at the influent meter box	Field Parameters.	P
	W500GPM-OUT	West 500 GPM TSS settling system at the effluent meter box		
June 12, 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, W_1, W_2
	W500GPM-IN	West 500 GPM TSS settling system at the influent meter box	Field Parameters.	P
	W500GPM-OUT	West 500 GPM TSS settling system at the effluent meter box	Field, Physical & General Parameters, VH & BTEX, EPHs & PAHs, Total, Dissolved and Speciated Metals, VOCs, Methylmercury, Dioxins & Furans.	P
June 13, 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
	W500GPM-IN	West 500 GPM TSS settling system at the influent meter box	Field Parameters.	P
	W500GPM-OUT	West 500 GPM TSS settling system at the effluent meter box		
	IDZ-W1-0.5	Howe Sound IDZ station W1; 0.5 m below surface	Field and Physical Parameters.	W_3
	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		
June 14, 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
	W500GPM-IN	West 500 GPM TSS settling system at the influent meter box	Field Parameters.	P
	W500GPM-OUT	West 500 GPM TSS settling system at the effluent meter box		

Notes: Monitoring frequency requirements under PE-111578 are indicated as follows:
D – daily monitoring of field parameters at WWTP and sedimentation pond influent and effluent stations.
M – monthly monitoring for all parameters at WWTP, sedimentation pond and receiving environment stations.
W_1 – initial high frequency monitoring for physical parameters at WWTP and sedimentation pond influent and effluent stations.
W_2 – initial high frequency monitoring for all parameters at WWTP and sedimentation pond influent and effluent stations.
W_3 – initial high frequency monitoring for field and physical parameters at IDZ stations.
P – periodic monitoring for targeted parameters that is supplementary to PE-111578 requirements.

3. Water Quality Results

3.1 Screening and Reporting Overview

Water quality and flow monitoring results are screened against field quality control (QC) criteria, benchmark values, operational minimum discharge objectives (MDOs) that the WWTPs are currently being operated to meet, PE-111578 discharge limits, as well as Canadian, Federal and BC water quality guidelines (WQGs). All water quality data are recorded in the Woodfibre LNG environmental monitoring database. However, for brevity, a sub-set of the results are presented in the weekly report appendices. Results are reported for parameters with a freshwater, estuarine or marine water quality guideline for the protection of aquatic life, parameters with a discharge limit, parameters of potential concern (*i.e.,* dioxins and furans) as well as other parameters that are relevant for water quality interpretation.

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

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

3.2 Summary of Reported Results

Field measurements and analytical results included in this weekly report (Report #68) are listed below in Table 3. 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:

- IDZ-E1, IDZ-E2, IDZ-W1, IDZ-W2, WQR1, WQR2 collected March 25 at 0.5 m below surface (chronic toxicity)
- SP-W-IN and SP-W-OUT collected May 19 (dioxins and furans)
- IDZ-E1, IDZ-E2, IDZ-W1, IDZ-W2, WQR1, and WQR2 collected May 27 at 0.5 m below surface (chronic toxicity)
- WWTP-E-IN and WWTP-E-OUT collected May 30 (dioxins and furans)
- SP-W-IN and SP-W-OUT collected June 1 (dioxins and furans)
- OUT-01 collected June 1 (methylmercury)
- OUT-02 collected June 2 (methylmercury)
- SP-E-IN, WWTP-E-IN, WWTP-E-OUT, SP-W-IN, and W500GPM-OUT collected June 3 (dioxins and furans)
- SW-01 and SW-04 collected June 6 (field and all analytical parameters)
- SP-E-IN, WWTP-E-IN, and WWTP-E-OUT collected June 9 (dioxins and furans)
- IDZ-E1, IDZ-E2, and WQR1 collected June 9 (field and all analytical parameters)
- SP-W-IN and W500GPM-OUT collected June 12 (methylmercury, dioxins and furans)
- IDZ-W1 and IDZ-W2 collected June 13 (field and all analytical parameters)

Table 3: Summary of Analytical Results Included in Weekly Discharge and Compliance Report #68.

Sample	Description	Sampling Date	Parameters Reported
SP-W-IN	West Sedimentation Pond influent monitored at cell 1 of the pond	May 15, 2025	Dioxins and Furans.
W500GPM-OUT	West 500 GPM TSS settling system at the effluent meter box		
SP-E-IN	East Sedimentation Pond influent monitored at cell 1 of the pond	May 22, 2025	Dioxins and Furans.
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	May 28, 2025	Dioxins and Furans.
W500GPM-OUT	West 500 GPM TSS settling system at the effluent meter box		
SP-E-IN	East Sedimentation Pond influent monitored at cell 1 of the pond	May 29, 2025	Dioxins and Furans.
E500GPM-OUT	East Sedimentation Pond 500 GPM TSS settling system at the effluent meter box		
OUT-01	Non-contact water diversion ditch outlet	June 1, 2025	Field, Physical and General Parameters, Total and Dissolved Metals.
OUT-02	Non-contact water diversion ditch outlet	June 2, 2025	Field, Physical and General Parameters, Total and Dissolved Metals.
IDZ-E1-0.5	Howe Sound IDZ station E1; 0.5 m below surface	June 3, 2025	Field and Physical Parameters.
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		
IDZ-W1-0.5	Howe Sound IDZ station W1; 0.5 m below surface		
IDZ-W1-2m	Howe Sound IDZ station W1; 2 m below surface		
IDZ-W1-SF	Howe Sound IDZ station W1; 2 m above the seafloor		
IDZ-W2-0.5	Howe Sound IDZ station W2; 0.5 m below surface		
IDZ-W2-2m	Howe Sound IDZ station W2; 2 m below surface		
IDZ-W2-SF	Howe Sound IDZ station W2; 2 m above the seafloor		
SP-W-OUT	West Sedimentation Pond clarified effluent discharge to Howe Sound, collected at sampling port	June 6, 2025	Field and Physical Parameters, Total and Dissolved Metals.
SP-E-IN	East Sedimentation Pond influent monitored at cell 1 of the pond	June 9, 2025	Field, Physical and General Parameters, Total and Dissolved Metals, Hexavalent Chromium, PAHs, VOCs, 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	June 12, 2025	Field, Physical and General Parameters, Total and Dissolved Metals, Hexavalent Chromium, PAHs, and VOCs.
W500GPM-OUT	West 500 GPM TSS settling system at the effluent meter box		

3.3 East Catchment

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

During the monitoring period (June 8 – 14), the TSS settling system (E500GPM) was not operational. The east catchment did not discharge during the monitoring period. Daily clarified effluent volumes, East WWTP treated effluent volumes, and discharge volumes from the east catchment are listed in Appendix B, Table B-6.

Field measurements were collected June 8 – 14 at multiple influent and effluent locations, as outlined in Section 2, and are tabulated in Appendix B, Table B-5. Analytical samples collected on June 9 (stations SP-E-IN, WWTP-E-IN, and WWTP-E-OUT) were available at the time of reporting. Screening results for east catchment contact water quality are summarized in Table B-1 and Table B-2 of Appendix B.

Dissolved oxygen was below the lower limit of the MDO in East WWTP effluent (WWTP-E-OUT) collected June 8 through June 13 (Appendix B, Table B-5) and total copper and total mercury were above the MDOs in East WWTP effluent collected on June 9 (Appendix B, Table B-2). The depletion of dissolved oxygen was also observed in contact water during dry conditions in 2024, and is speculated to be induced by warm temperatures and limited freshwater inputs (*i.e.*, from rain) to the contact water management system during dry conditions. East WWTP treated effluent was directed to the East Sedimentation Pond and there was no discharge from the pond to Howe Sound during monitoring period (June 8 – 14). The metal parameters above the MDOs are tracked in Table 4.

Methylmercury results were available for East Sedimentation Pond influent (SP-E-IN) and East WWTP influent and effluent (WWTP-E-IN and WWTP-E-OUT, respectively) collected June 9. Methylmercury was 0.000690 mg/L, above the WQG (0.0001 mg/L) in the WWTP-E-OUT sample collected June 9 (Appendix B, Table B-3). East WWTP treated effluent was directed to the East Sedimentation Pond and there was no discharge from the pond to Howe Sound on June 9. The

total mercury concentration is also listed in Appendix B, Table B-3 and was above the MDO. Mercury parameters are tracked in Table 4.

Dioxin and furan results were reported for East Sedimentation Pond influent (station SP-E-IN) and East WWTP influent and effluent (WWTP-E-IN and WWTP-E-OUT, respectively) collected May 22 (as discussed in Report #65) and for East Sedimentation Pond influent (station SP-E-IN) and clarified effluent from the E500GPM TSS settling system (E500GPM-OUT) collected on May 29 (as discussed in Report #66). The lower and upper bound PCDD/F TEQ concentrations in effluent discharged from the East WWTP (WWTP-E-OUT) on May 22 were 0 pg/L and 1.03 pg/L, respectively. The lower and upper bound PCDD/F TEQ concentrations in clarified effluent discharged from the E500GPM TSS settling system (E500GPM-OUT) on May 29 were 0.00888 pg/L and 1.41 pg/L, respectively. Results are tabulated in Appendix B, Table B-4.

3.4 West Catchment

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

During the monitoring period (June 8 – 14), West Sedimentation Pond effluent was directed to the TSS settling system (W500GPM) each day except June 10, and clarified effluent was either recirculated to the pond or reclaimed and used for construction purposes (refer to Section 1.2). The smaller TSS settling system (ESC) was not operational. Daily clarified effluent and discharge volumes from the west catchment are summarized in Appendix C, Table C-5.

Field measurements were collected June 8 – 14 at multiple influent and effluent locations, as outlined in Section 2, and are tabulated in Appendix C, Table C-4. Analytical samples collected June 6 (station SP-W-OUT, as discussed in Report #67) and June 12 (stations SP-W-IN and W500GPM-OUT) were available at the time of reporting. Screening results for west catchment contact water quality are tabulated in Table C-1 and Table C-2 of Appendix C.

Field measurements and analytical results for the June 6 SP-W-OUT sample met PE-111578 discharge limits and WQGs except for dissolved oxygen (7.89 mg/L), which was slightly below

the lower limit of the WQG (8 mg/L). The depletion of dissolved oxygen was also observed in contact water during dry conditions in 2024, and is speculated to be induced by warm temperatures and limited freshwater inputs (*i.e.,* from rain) to the contact water management system during dry conditions. Field measurements collected in September 2024, following the discharge of oxygen depleted effluent from SP-E-OUT, found no discernable influence in Howe Sound dissolved oxygen concentrations along a transect between the IDZ-E1 and IDZ-E2 sampling stations. Therefore, it is inferred there is very rapid replenishment of dissolved oxygen in discharged effluent due to atmospheric exposure on the foreshore at the discharge location, and in the Howe Sound surface waters within the IDZ.

During the monitoring period (June 8 – 14), field measurements and analytical results for samples collected at station W500GPM-OUT met PE-111578 discharge limits and WQGs except for dissolved oxygen on June 8 and 9. Clarified effluent from the W500GPM system was recirculated to the pond June 8 and 9, and there was no discharge to Howe Sound on those days.

Dioxin and furan results were reported for West Sedimentation Pond influent (station SP-W-IN) and clarified effluent from the W500GPM TSS settling system (W500GPM-OUT) collected May 15 (as discussed in Report #64) and May 28 (as discussed in Report #66). The lower and upper bound PCDD/F TEQ concentrations in clarified effluent discharged from the E500GPM TSS settling system (E500GPM-OUT) on May 15 and May 28 ranged from 0 to 0.00120 pg/L and 0.765 to 0.905 pg/L, respectively. Results are tabulated in Appendix C, Table C-3.

3.5 Non-Contact Water Diversion Ditch Outlets

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

East Creek was temporarily diverted to OUT-11 on September 17, 2024 to facilitate replacement of the OUT-12 culvert through which East Creek previously discharged. Only East Creek water is flowing through the OUT-11 culvert. East Creek is monitored at freshwater receiving environment station SW-04 and station OUT-11 is not monitored while the diversion is in place.

Analytical results were available at the time of reporting for the June 1 and June 2 non-contact water diversion ditch outlet sample collected at stations OUT-01 and OUT-02, respectively. Parameter concentrations met WQGs except field pH, total aluminum and dissolved copper. Field pH measured at OUT-01 on June 1 (pH 6.1) was below the lower limit of the WQG (pH 6.5). Total aluminum (ranging from 0.0944 to 0.105 mg/L) and dissolved copper (ranging from 0.00066 to 0.00105 mg/L) were above the respective calculated WQGs in the June 1 OUT-01 and June 2 OUT-02 samples. The field pH, total aluminum and dissolved copper results are comparable to the baseline concentration ranges observed for diversion ditch water quality except the dissolved

copper concentration measured at OUT-02 on June 2 (0.00105 mg/L) was slightly above the maximum value observed during baseline monitoring (0.00095 mg/L). The dissolved copper concentrations observed at Woodfibre, Mill and East Creek background monitoring stations upstream of project influence range from <0.0002 to 0.00137 mg/L, therefore dissolved copper concentrations up to 0.00137 mg/L are inferred to represent natural conditions in non-contact water. The pH, total aluminum and dissolved copper values measured at OUT-02 are considered to represent natural conditions for non-contact waters and are therefore not flagged as project influenced exceedances.

3.6 Freshwater and Estuarine Water Receiving Environment

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

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

3.7 Marine Water Receiving Environment

Marine water receiving environment samples are screened against Canadian, Federal and BC WQGs for the protection of marine water aquatic life. Parameter concentrations above a WQG value, but within the range of values observed in the baseline monitoring program or reference stations are considered to represent the natural condition of the water and not flagged as a possible indicator of project influence. Similarly, WQG exceedances at marine reference stations are considered to represent background conditions that are not influenced by the project. It is expected that samples collected within the IDZ (*i.e.,* mixing zone) defined in PE-111578 for the authorized discharge locations may have parameter concentrations above baseline or background (*i.e.,* reference station) concentrations due to project influence. The analytical results, field parameters and WQGs are summarized in Appendix E.

Analytical results and field measurements were available at the time of reporting for marine water samples collected at 0.5 and 2 m below the water surface and 2 m above the seafloor on June 3 at IDZ-E1, IDZ-E2, IDZ-W1, and IDZ-W2 (as discussed in Report #67).

Parameter concentrations met WQGs except dissolved oxygen in the deep water samples (Appendix E; Tables E-1 and Table E-2). In samples collected at 2 m above the seafloor at IDZ-E2, IDZ-W1 and IDZ-W2 on June 3, dissolved oxygen ranged from 6.73 to 7.73 mg/L and was below the lower limit of the WQG (8 mg/L). Low concentrations of dissolved oxygen are indicative of

influence from the deeper saline waters in the northern basin of Howe Sound and are a natural condition of marine water at the WDA monitoring stations. The dissolved oxygen concentrations observed at the IDZ monitoring stations are within concentrations that have been observed in the pre-construction baseline monitoring program or within background ranges observed at marine reference stations and are therefore not attributed to project influence.

4. Quality Control

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

Table 4: Weekly Report QC Evaluations and Ongoing Items

QC Procedure	Observation	Investigation/Resolution
Reporting Period (June 8 – 14, Report #68)		
Authorized Works and Monitoring Program Evaluation	The authorized works and monitoring stations have not been established as described in PE-111578.	The PE-111578 authorized works for water management have been constructed, except for some of the conveyance ditches which require completion of site grading prior to installation. Sumps, pumps and hoses are used for temporary conveyance until the ditches are completed. The lower reach of East Creek has been temporarily diverted through OUT-11 outfall since September 17, 2024, to facilitate replacement of the East Creek outfall culvert (OUT-12). All monitoring stations have been established except at SP-E-IN-1, SP-E-IN-2, SP-W-IN-1 and SP-W-IN-2 where substitute stations are established in lieu of those listed in PE-111578 (refer to Section 2). This item remains open.
Pending Data	Analytical results not reported.	Analytical results and field parameters for receiving environment samples collected June 9 and 13 were not included with Report #68. Methylmercury results for contact water and treated water samples collected June 12 and dioxins and furans results for contact water and treated water samples collected June 9 and 12 were not included with Report #68. The pending results will be included in future weekly reports when available. This item remains open.
Ongoing Items from Previous Weekly Reports		
Report #57: Pending Data	Analytical results not reported.	Chronic toxicity results for marine receiving environment samples collected March 25 were not included with Report #67. The pending results will be included in future weekly reports when available. This item remains open.
Report #62: WWTP Performance Evaluation	Field pH, total copper, total mercury, total zinc, and hexavalent Cr above the MDO.	This item was first noted in Report #46 (January 8 sample) and has been updated with January 14 results (Report #47), January 24 and January 28 results (Report #49), February 5 and 6 results (Report #50), February 10 results (Report #51), February 15 and 20 results (Report #52), February 24 results (Report #53), March 8 results (Report #55), March 17 results (Report #56), April 24 results (Reports #61 and #62), May 3 results (Report #63), May 10 results (Report #64), May 14 results (Report #64 and #65), May 22 results (Report #65 and #66), June 3 results (Report #67), and June 9 results (Report #68). The total copper concentrations were 0.00809, 0.00595, 0.00895, 0.00518, 0.00542, 0.00525, 0.00450, 0.00734, 0.00464, 0.00462, and 0.00573 mg/L in samples collected at WWTP-E-OUT on January 8, 14, 24, 28, February 24, March 8, 17, April 24, May 10, June 3, and June 9, respectively, and ranged from 0.00613 to 0.0108 mg/L in four replicate samples collected on February 15. The total mercury concentrations were 0.0355, 0.185, 0.223, 0.0882, 0.0101, 0.0269, 0.0524, 0.0404, 0.0217, and 0.0167 µg/L in samples collected on January 24, 30, February 20, 24, April 24, May 3, May 10, May 14, May 22, and June 3, respectively, and were 0.0615 and 0.0644 mg/L in two replicate samples collected February 15. The total zinc concentrations were 0.0137, 0.0152, and 0.0156 mg/L in the samples collected on January 24, February 20 and 24, and were 0.0223 and 0.0234 mg/L in two of four replicate samples collected February 15. Hexavalent chromium concentrations were 0.00197 and 0.00166 mg/L in samples collected January 24 and 28 at WWTP-E-OUT. Field pH was 9.1, 9.2, and 9.6 in samples collected at WWTP-E-OUT on February 5, 6 and 10, respectively. As of June 3, and since February/March, field pH and total metals have been consistently meeting MDOs except total copper (April to June) and total mercury (April to June). The WWTP is not designed to treat mercury. Possible contact water sources have been evaluated and a point source has not been identified. A separate table entry for methylmercury was added in Report #67 and will no longer be discussed in this entry. Treatment performance for total copper continues to be monitored; the metal removal media was replaced on June 5 and the fresh media was expected to improve copper removal; however, the total copper result for WWTP-E-OUT collected June 9 (0.00573 mg/L) following the media replacement was above the MDO. The treatment performance for total copper continues to be reviewed. This item remains open for total copper.
Report #64: Pending Data	Analytical results not reported.	Dioxins and furans results for contact water and treated water samples collected May 15 are discussed in Section 3.4 of Report #68. This item is closed.
Report #65: Potential Project Influence	Hexavalent chromium at East Creek above WQG and the baseline concentration range.	Hexavalent chromium concentration (0.00212 mg/L) observed at the East Creek station (SW-04) on May 12 was 2.1 times greater than the WQG and 6.8 times greater than the maximum concentration observed in the pre-construction baseline monitoring program (0.00031 mg/L). Potential influences to East Creek water quality at station SW-04 are under review. There were no LNG facility construction activities in the vicinity of SW-04 monitoring station at the time of the exceedance. Possible influence to East Creek from the Eagle Mountain Tunnel Construction project is being investigated. This item remains open.
Report #65: Pending Data	Analytical results not reported.	Dioxins and furans results for contact water and treated water samples collected May 22 are discussed in Section 3.3 of Report #68. Dioxins and furans results for contact water and treated water samples collected May 19 were not included with Report #68. The pending results will be included in future weekly reports when available. This item remains open.
Report #66: Pending Data	Analytical results not reported.	Dioxins and furans results for contact water and treated water samples collected May 28 and 29 are discussed in Sections 3.3 and 3.4 of Report #68. Chronic toxicity results for receiving environment samples collected May 27 and dioxins and furans results for contact water and treated water samples collected May 30 were not included with Report #68. The pending results will be included in future weekly reports when available. This item remains open.
Report #67: Non-complaint Effluent	Total zinc exceeded discharge limits.	Non-compliant effluent was discharged from SP-W-OUT on June 1, with total zinc (0.0372 mg/L) 2.8 times above the discharge limit. BCER has been notified and a report summarizing the non-compliance is submitted to BCER on June 19. The exceedance is attributed to a galvanized component that was installed in the clarified effluent pipe just upstream of the sample collection port and just prior to sample collection on June 1. The galvanized component was removed on June 3 and T-Zn concentrations downstream of the removed galvanized component at W500GPM-OUT (June 3, Report #67) and SP-W-OUT (June 6, Report #68) were <0.003 and 0.0048 mg/L, respectively, confirming the T-Zn concentration in effluent was below the discharge limit following removal of the component. This item is closed.
Report #67: WQG Evaluation	Total mercury and methylmercury above WQG.	Report #62: methylmercury and total mercury measured at station SP-E-OUT on April 24 (0.000264 and 0.00851 µg/L, respectively) were 2.6 times greater than the calculated WQG. Report #65: methylmercury (0.000149 and 0.000158 µg/L) and total mercury (0.00821 and 0.00825 µg/L) measured in two replicate samples at station SP-W-OUT on May 19 were 1.5 to 1.6 times greater than the WQGs. Report#66: methylmercury results for marine receiving environment samples collected at 2 m below surface and at 2 m above the seafloor at IDZ-W1 on May 7 were retested by the laboratory and the original results (0.000101 and 0.000092 ug/L, respectively) were determined to be incorrect. Revised results are <0.000020 and 0.000030 ug/L, respectively, below the WQG (0.0001 µg/L). Report #67: Methylmercury and total mercury measured at non-contact water diversion ditch station OUT-02 on May 19 (0.000213 and 0.00319 µg/L, respectively) were above the WQGs and similar to or below maximum values (0.000156 and <0.010 µg/L, respectively) for diversion ditch samples, suggesting there may be background influence. The sample is being retested. A review of site activities at the time of sampling indicates it is unlikely there was project influence along the ditch line. In general, there has been an increased incidence of total mercury and methylmercury exceedances in site contact waters since late April. During this time the site conditions have been generally drier than through the winter months. Possible project related sources have been evaluated, and a point source of mercury has not been identified. There have been instances of the lab reporting falsely elevated receiving environment results (Report#66, May 7 marine water samples, see above entry), further review of the test method with the lab will be undertaken. Baseline monitoring of diversion ditch water suggests there may be non-project influences on the concentration of mercury in diversion ditch waters. The test results for the diversion ditch sample collected May 19 (Report #67) are being retested to evaluate for lab error, lab retesting results are pending. This item remains open.
Report #67: Pending Data	Analytical results not reported.	Analytical results for the treated water sample collected June 6 is discussed in Section 3.4 of Report #68. Analytical results and field parameters for non-contact diversion ditch samples and receiving environment samples collected June 1, 2, and 3 are discussed in Sections 3.5 and 3.7 of Report #68. Analytical results and field parameters for receiving environment samples collected June 6 were not included with Report #68. Methylmercury results for non-contact diversion ditch samples collected June 1 and 2 and dioxins and furans results for contact water and treated water samples collected June 1 and June 3 were not included with Report #68. The pending results will be included in future weekly reports when available. This item remains open.

Notes:

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

5. Closure

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

Regards,

LORAX ENVIRONMENTAL SERVICES LTD.

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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

DATE SAVED:	Jun 19, 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: Water Management Facilities and Established PE-111578 Monitoring Stations (June 14, 2025)

PROJECT #: A633-7

FIGURE: 1

D:\WLNG\Drafting Figures\APRX\WLNG Data Compilation_b49e17\p30\WLNG Data Compilation.aprx Figure 1 - Monitoring and Compliance Locations

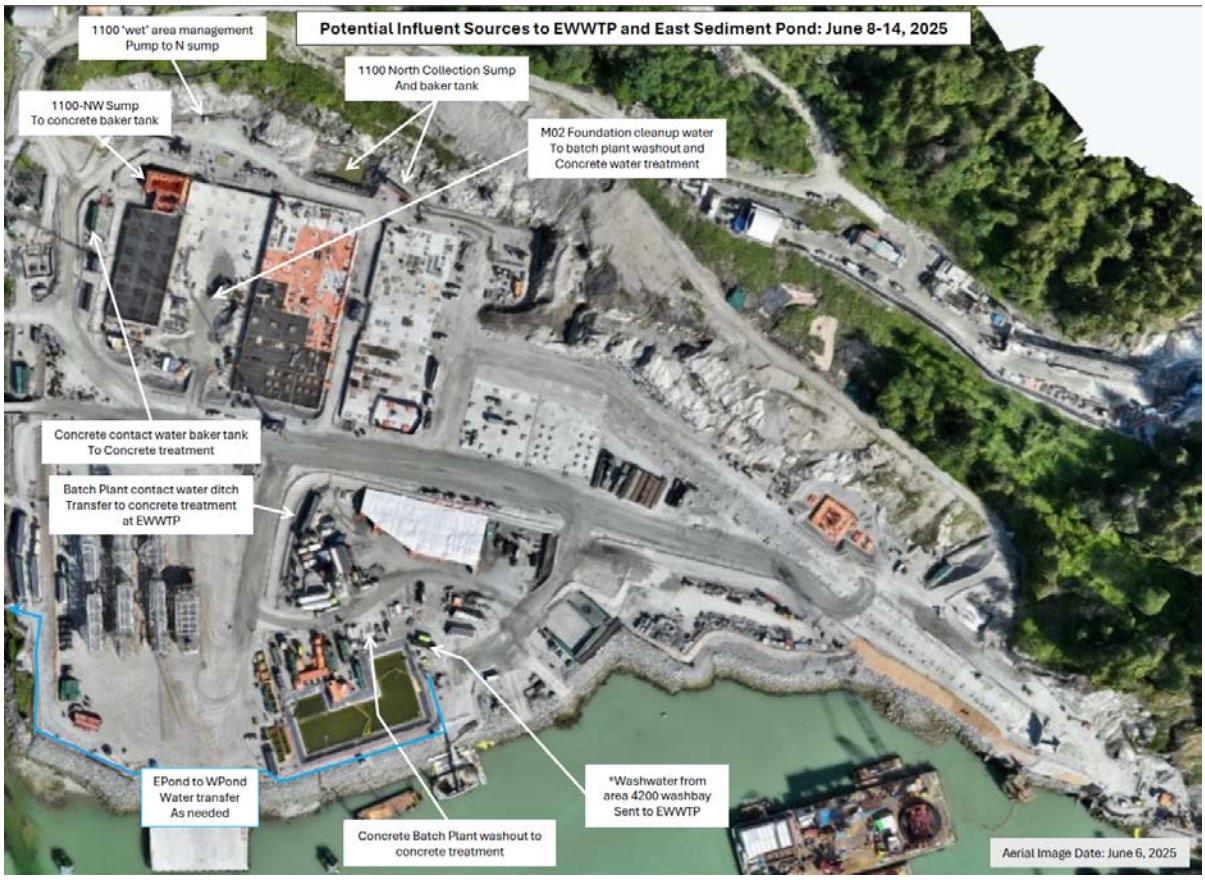

Figure 2: East Catchment contact water management facilities (June 8 – 14).

Figure 3: West Catchment contact water management facilities (June 8 – 14).

Figure 4: Aerial view of the East Sedimentation Pond (June 13, 2025). The East WWTP is located on the left side and the E500GPM TSS settling system is situated along the bottom edge of the pond.

Figure 5: Aerial view of the West Sedimentation Pond (June 13, 2025). The TSS settling systems are located to the left (W500GPM) and right (ESC) of the pond.

Appendix B: East Catchment Monitoring Results

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

Parameter	Unit	Lowest Applicable Guideline [1]		PE-111578 Discharge Limit	Station SP-E-IN Influent	Station WWTP-E-IN Influent
					SP-E-IN	WWTP-E-IN
					VA25B3616-001	VA25B3616-002
		Long Term	Short Term		2025-06-09 8:49	2025-06-09 9:02
General Parameters						
pH - Field	pH units	- [2]	-	5.5 - 9.0	9.2	8.0
Specific Conductivity - Field	µS/cm	-	-	-	2288	1802
Temperature - Field	°C	-	-	-	24.3	23.6
Salinity - Field	ppt	-	-	-	1.77	0.91
Turbidity - Field	NTU	-	-	-	4.88	12.14
TSS	mg/L	-	-	25 or 75 [6]	6.8	9.8
Dissolved Oxygen - Field	mg/L	≥8	-	-	***5.79***	***7.81***
Anions and Nutrients						
Sulphate	mg/L	-	-	-	863	634
Chloride	mg/L	-	-	-	25.3	26.6
Fluoride	mg/L	-	1.5	-	<0.400	0.309
Ammonia (N-NH_3)	mg/L	0.13-0.97 [3]	0.85-6.4 [3]	-	***0.179***	<0.0050
Nitrite (N-NO_2)	mg/L	-	-	-	0.207	<0.0100
Nitrate (N-NO_3)	mg/L	3.7	339	-	1.48	<0.0500
Total Metals						
Aluminum, total (T-Al)	mg/L	-	-	-	1.32	0.441
Antimony, total (T-Sb)	mg/L	-	0.27 [4]	-	0.0018	0.00128
Arsenic, total (T-As)	mg/L	0.0125	0.0125	-	0.00542	0.00283
Barium, total (T-Ba)	mg/L	-	-	-	0.0139	0.0102
Beryllium, total (T-Be)	mg/L	0.1	-	-	<0.000040	<0.000040
Boron, total (T-B)	mg/L	1.2	-	-	0.301	0.08
Cadmium, total (T-Cd)	mg/L	0.00012	-	-	<0.0000550	<0.0000550
Chromium, total (T-Cr)	mg/L	-	-	-	0.00361	<0.00100
Cobalt, total (T-Co)	mg/L	-	-	-	0.00026	<0.00020
Copper, total (T-Cu)	mg/L	- [2]	- [2]	0.0043	0.00425	0.00476
Iron, total (T-Fe)	mg/L	-	-	-	0.375	0.317
Lead, total (T-Pb)	mg/L	- [2]	- [2]	0.0035	0.000676	0.00215
Manganese, total (T-Mn)	mg/L	-	-	-	0.0331	0.0162
Mercury, total (T-Hg)	mg/L	0.000016 [5]	-	-	***0.00013***	***0.0000396***
Molybdenum, total (T-Mo)	mg/L	-	-	-	0.138	0.127
Nickel, total (T-Ni)	mg/L	0.0083	-	-	<0.00100	<0.00100
Selenium, total (T-Se)	mg/L	0.002	-	-	0.00115	0.00057
Silver, total (T-Ag)	mg/L	0.0005	0.0037	-	<0.000020	<0.000020
Thallium, total (T-Tl)	mg/L	-	-	-	0.000094	0.000037
Uranium, total (T-U)	mg/L	-	-	-	0.0106	0.0224
Vanadium, total (T-V)	mg/L	- [2]	-	0.0081	0.00987	0.00335
Zinc, total (T-Zn)	mg/L	- [2]	- [2]	0.0133	<0.0060	0.0129
Hexavalent Chromium, total	mg/L	0.0015	-	-	0.00124	<0.00050
Dissolved Metals						
Cadmium, dissolved (D-Cd)	mg/L	-	-	-	<0.0000500	<0.0000500
Copper, dissolved (D-Cu)	mg/L	-	-	-	0.00272	0.00137
Iron, dissolved (D-Fe)	mg/L	-	-	-	0.032	0.024
Lead, dissolved (D-Pb)	mg/L	-	-	-	0.000105	0.000267
Manganese, dissolved (D-Mn)	mg/L	-	-	-	0.0196	0.00256
Nickel, dissolved (D-Ni)	mg/L	-	-	-	<0.00100	<0.00100
Strontium, dissolved (D-Sr)	mg/L	-	-	-	0.166	0.213
Vanadium, dissolved (D-V)	mg/L	-	-	-	0.00877	0.00250
Zinc, dissolved (D-Zn)	mg/L	-	-	-	<0.0020	0.0041
Polycyclic Aromatic Hydrocarbons (PAHs)						
Acenaphthene	mg/L	0.006	-	-	<0.000010	<0.000010
Acridine	mg/L	-	-	-	<0.000010	<0.000010
Anthracene	mg/L	-	-	-	<0.000010	<0.000010
Benz(a)anthracene	mg/L	-	-	-	<0.000010	<0.000010
Benzo(a)pyrene	mg/L	0.00001	-	-	<0.0000050	<0.0000050
Chrysene	mg/L	0.0001	-	-	<0.000010	<0.000010
Fluoranthene	mg/L	-	-	-	<0.000010	<0.000010
Fluorene	mg/L	0.012	-	-	<0.000010	<0.000010
1-methylnaphthalene	mg/L	0.001	-	-	<0.000010	<0.000010
2-methylnaphthalene	mg/L	0.001	-	-	<0.000010	<0.000010
Naphthalene	mg/L	0.001	-	-	<0.000050	<0.000050
Phenanthrene	mg/L	-	-	-	<0.000020	<0.000020
Pyrene	mg/L	-	-	-	<0.000010	<0.000010
Quinoline	mg/L	-	-	-	0.000125	<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:
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 (June 8 – 14).
[1] The lowest applicable guidelines from approved or working BC WQGs, Canadian (CCME) WQGs and Federal WQGs.
[2] The WQG was not evaluated for parameters with discharge limits.
[3] The BC WQG for total ammonia is salinity, pH and temperature dependent; see Tables 27E and 27F in BC WQG guidance document.
[4] The working BC WQG for trivalent antimony [SB(III)] is 0.27 mg/L and is applied to total antimony results.
[5] When MeHg ≤0.5% of total Hg, the BC WQG = 0.00002 mg/L. The Canadian WQG = 0.000016 mg/L.
[6] The PE-111578 discharge limit for TSS is 25 mg/L under dry conditions and 75 mg/L for each day of Wet Conditions.

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

Parameter	Unit	Lowest Applicable Guideline [1]		PE-111578 Discharge Limit	Station WWTP-E-OUT Effluent WWTP-E-OUT VA25B3616-003 2025-06-09 8:36
		Long Term	Short Term		
General Parameters					
pH - Field	pH units	- [2]	-	5.5 - 9.0	6.3
Specific Conductivity - Field	µS/cm	-	-	-	2279
Temperature - Field	℃	-	-	-	25.0
Salinity - Field	ppt	-	-	-	1.17
Turbidity - Field	NTU	-	-	-	1.0
TSS	mg/L	-	-	25 or 75 [6]	<3.0
Dissolved Oxygen - Field	mg/L	≥8	-	-	***2.27***
Anions and Nutrients					
Sulphate	mg/L	-	-	-	846
Chloride	mg/L	-	-	-	25.4
Fluoride	mg/L	-	1.5	-	<0.400
Ammonia (N-NH_3)	mg/L	9.4 [3]	62 [3]	-	0.228
Nitrite (N-NO_2)	mg/L	-	-	-	0.0969
Nitrate (N-NO_3)	mg/L	3.7	339	-	1.15
Total Metals					
Aluminum, total (T-Al)	mg/L	-	-	-	1.58
Antimony, total (T-Sb)	mg/L	-	0.27 [4]	-	0.00188
Arsenic, total (T-As)	mg/L	0.0125	0.0125	-	0.00403
Barium, total (T-Ba)	mg/L	-	-	-	0.00492
Beryllium, total (T-Be)	mg/L	0.1	-	-	<0.000040
Boron, total (T-B)	mg/L	1.2	-	-	0.415
Cadmium, total (T-Cd)	mg/L	0.00012	-	-	<0.0000500
Chromium, total (T-Cr)	mg/L	-	-	-	<0.00100
Cobalt, total (T-Co)	mg/L	-	-	-	<0.00020
Copper, total (T-Cu)	mg/L	- [2]	- [2]	0.0043	0.00573
Iron, total (T-Fe)	mg/L	-	-	-	0.028
Lead, total (T-Pb)	mg/L	- [2]	- [2]	0.0035	0.000311
Manganese, total (T-Mn)	mg/L	-	-	-	0.0242
Mercury, total (T-Hg)	mg/L	0.000016 [5]	-	-	***0.0000588***
Molybdenum, total (T-Mo)	mg/L	-	-	-	0.135
Nickel, total (T-Ni)	mg/L	0.0083	-	-	<0.00100
Selenium, total (T-Se)	mg/L	0.002	-	-	0.00106
Silver, total (T-Ag)	mg/L	0.0005	0.0037	-	<0.000020
Thallium, total (T-Tl)	mg/L	-	-	-	0.000113
Uranium, total (T-U)	mg/L	-	-	-	0.00332
Vanadium, total (T-V)	mg/L	- [2]	-	0.0081	0.00786
Zinc, total (T-Zn)	mg/L	- [2]	- [2]	0.0133	<0.0060
Hexavalent Chromium, total	mg/L	0.0015	-	-	0.00092
Dissolved Metals					
Cadmium, dissolved (D-Cd)	mg/L	-	-	-	<0.0000450
Copper, dissolved (D-Cu)	mg/L	-	-	-	0.00221
Iron, dissolved (D-Fe)	mg/L	-	-	-	<0.020
Lead, dissolved (D-Pb)	mg/L	-	-	-	0.000146
Manganese, dissolved (D-Mn)	mg/L	-	-	-	0.0256
Nickel, dissolved (D-Ni)	mg/L	-	-	-	<0.00100
Strontium, dissolved (D-Sr)	mg/L	-	-	-	0.128
Vanadium, dissolved (D-V)	mg/L	-	-	-	0.00706
Zinc, dissolved (D-Zn)	mg/L	-	-	-	0.0068
Polycyclic Aromatic Hydrocarbons (PAHs)					
Acenaphthene	mg/L	0.006	-	-	<0.000010
Acridine	mg/L	-	-	-	<0.000010
Anthracene	mg/L	-	-	-	<0.000010
Benz(a)anthracene	mg/L	-	-	-	<0.000010
Benzo(a)pyrene	mg/L	0.00001	-	-	<0.0000050
Chrysene	mg/L	0.0001	-	-	<0.000010
Fluoranthene	mg/L	-	-	-	<0.000010
Fluorene	mg/L	0.012	-	-	<0.000010
1-methylnaphthalene	mg/L	0.001	-	-	<0.000010
2-methylnaphthalene	mg/L	0.001	-	-	<0.000010
Naphthalene	mg/L	0.001	-	-	<0.000050
Phenanthrene	mg/L	-	-	-	<0.000020
Pyrene	mg/L	-	-	-	<0.000010
Quinoline	mg/L	-	-	-	0.000139
Volatile Organic Compounds (VOCs)					
Benzene	mg/L	0.11	-	-	<0.00050
Ethylbenzene	mg/L	0.25	-	-	<0.00050
Methyl-tert-butyl-ether	mg/L	5	0.44	-	<0.00050
Styrene	mg/L	-	-	-	<0.00050
Toluene	mg/L	0.215	-	-	<0.00040
Total Xylenes	mg/L	-	-	-	<0.00050
Chlorobenzene	mg/L	0.025	-	-	<0.00050
1,2-Dichlorobenzene	mg/L	0.042	-	-	<0.00050

Notes:

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

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

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

The East Catchment did not discharge during the monitoring period (June 8 – 14).

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

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

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

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

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

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

Table B-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]	0.0040 – 0.0085 [3,4]
Station	**Water Type**	**Sample ID**	**Lab ID**	**Sampling Date**		
Influent						
SP-E-IN	Influent	SP-E-IN	VA25B3616-001	2025-06-09	***0.00247***	***0.13***
WWTP-E-IN	Influent	WWTP-E-IN	VA25B3616-002	2025-06-09	***0.000981***	***0.0396***
Effluent						
WWTP-E-OUT	Effluent	WWTP-E-OUT	VA25B3616-003	2025-06-09	***0.000690***	***0.0588***

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

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

Parameter					**Lower Bound PCDD/F TEQ**	**Upper Bound PCDD/F TEQ**
Unit					**pg/L**	**pg/L**
Station	**Water Type**	**Sample ID**	**Lab ID**	**Sampling Date**		
Influent						
SP-E-IN	Influent	SP-E-IN	VA25B1982-003	2025-05-22	0.0288	1.22
SP-E-IN	Influent	SP-E-IN	VA25B2670-002	2025-05-29	0.00453	1.22
WWTP-E-IN	Influent	WWTP-E-IN	VA25B1982-001	2025-05-22	0.0232	0.909
Effluent						
WWTP-E-OUT	Effluent	WWTP-E-OUT	VA25B1982-002	2025-05-22	0	1.03
E500GPM-OUT	Effluent	E500GPM-OUT	VA25B2670-001	2025-05-29	0.00888	1.41

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

Table B-5: East Catchment Field Measurements Collected During the Monitoring Period (June 8 – 14).

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	2025-06-08 11:28	23.4	***6.95***	1.12	34.6	28.8	7.2	2358	No
SP-E-IN	Influent	2025-06-09 8:49	24.3	***5.79***	1.77	4.88	6.6	9.2	2288	No
SP-E-IN	Influent	2025-06-12 15:44	21.3	8.75	1.08	17.40	16.0	6.6	2101	No
SP-E-IN	Influent	2025-06-13 9:58	19.1	8.39	0.96	48.38	39.1	9.7	1890	No
SP-E-IN	Influent	2025-06-14 14:45	18.4	9.41	0.76	10.84	11.1	6.9	1503	No
WWTP-E-IN	Influent	2025-06-08 15:21	27.3	8.24	0.89	11.56	11.6	8.1	1771	No
WWTP-E-IN	Influent	2025-06-09 9:02	23.6	***7.81***	0.91	12.14	12.1	8.0	1802	No
WWTP-E-IN	Influent	2025-06-10 15:51	25.8	***6.83***	0.90	6.24	7.7	7.9	1790	No
WWTP-E-IN	Influent	2025-06-11 10:36	24.1	***6.82***	0.87	5.76	7.3	7.9	1725	No
WWTP-E-IN	Influent	2025-06-12 15:49	22.1	8.81	0.81	32.97	27.6	8.0	1603	No
WWTP-E-IN	Influent	2025-06-13 9:29	19.3	9.24	0.81	16.32	15.2	7.9	1601	No
WWTP-E-IN	Influent	2025-06-14 14:37	19.3	9.55	0.76	13.89	13.4	7.1	1509	No
Effluent [5]										
WWTP-E-OUT	Effluent	2025-06-08 15:29	22.9	***4.41*** [7]	1.28	2.88	5.1	6.9	2491	No
WWTP-E-OUT	Effluent	2025-06-09 8:36	25.0	***2.27*** [7]	1.17	1.00	3.7	6.3	2279	No
WWTP-E-OUT	Effluent	2025-06-10 15:48	23.9	***2.87*** [7]	1.09	1.30	4.0	6.6	2133	No
WWTP-E-OUT	Effluent	2025-06-11 10:33	23.2	***1.96*** [7]	1.15	0.89	3.7	6.7	2241	No
WWTP-E-OUT	Effluent	2025-06-12 15:47	22.2	***6.68*** [7]	1.11	1.97	4.5	6.3	2166	No
WWTP-E-OUT	Effluent	2025-06-13 9:53	20.0	***7.60*** [7]	0.88	8.38	9.2	6.7	1736	No
WWTP-E-OUT	Effluent	2025-06-14 14:40	17.6	8.41	0.79	2.14	4.6	6.4	1556	No

Notes:
Results ***underlined in bold italics*** exceed the applicable long-term water quality guideline for the protection of marine water aquatic life.
Shaded results exceed the applicable short-term water quality guideline for the protection of marine water aquatic life.
Results in orange text 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 station SP-E-IN were not collected on June 10 and 11 as cell 1 of the pond was drained for sediment removal.
[5] There was no discharge at the authorized discharge location (SP-E-OUT) during the monitoring period (June 8 – 14), therefore daily field measurements for SP-E-OUT were not collected on those days.
[6] The PE-111578 discharge limit for TSS is 25 mg/L under dry conditions and 75 mg/L for each day of Wet Conditions.
[7] East WWTP treated effluent is directed to the East Sedimentation Pond and there was no discharge from the pond to Howe Sound during the monitoring period (June 8 – 14).

Table B-6: East Catchment Daily Discharge Volumes for the Monitoring Period (June 8 – 14).

	East Sedimentation Pond Effluent	Transfer to West Sedimentation Pond	East TSS Settling System (E500GPM) Clarified Effluent (Station E500GPM-OUT)[2]	East WWTP Treated Effluent (Station WWTP-E-OUT)[3]	Discharge to Howe Sound (Station SP-E-OUT)
Unit	**m^3**	**m^3**	**m^3**	**m^3**	**m^3**
PE-111578 Discharge Limit	-	-	-	1100	- [1]
Date					
2025-06-08	0	139	0	306	0
2025-06-09	0	683	0	326	0
2025-06-10	0	193	0	40	0
2025-06-11	0	0	0	186	0
2025-06-12	0	0	0	363	0
2025-06-13	0	0	0	606	0
2025-06-14	0	0	0	640	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] E500GPM clarified effluent is discharged to Howe Sound or recirculated to the East Sedimentation Pond based on operational considerations. Therefore, the E500GPM clarified effluent volume is generally higher than the volume discharged to Howe Sound. The E500GPM was not operational during the monitoring period (June 8 -14).
[3] East WWTP treated effluent was recirculated to the East Sedimentation Pond.

Appendix C: West Catchment Monitoring Results

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

Parameter	Unit	Lowest Applicable Guideline [1]		PE-111578 Discharge Limit	Station SP-W-IN Influent SP-W-IN VA25B4066-001 2025-06-12 12:14
		Long Term	Short Term		
General Parameters					
pH - Field	pH units	- [2]	-	5.5 - 9.0	8.0
Specific Conductivity - Field	µS/cm	-	-	-	1621
Temperature - Field	°C	-	-	-	22.7
Salinity - Field	ppt	-	-	-	0.82
Turbidity - Field	NTU	-	-	-	67.4
TSS	mg/L	-	-	25 or 75 [6]	73.8
Dissolved Oxygen - Field	mg/L	≥8	-	-	8.69
Anions and Nutrients					
Sulphate	mg/L	-	-	-	568
Chloride	mg/L	-	-	-	20.4
Fluoride	mg/L	-	1.5	-	0.267
Ammonia (N-NH_3)	mg/L	0.97 [3]	6.4 [3]	-	0.0256
Nitrite (N-NO_2)	mg/L	-	-	-	0.0368
Nitrate (N-NO_3)	mg/L	3.7	339	-	0.319
Total Metals					
Aluminum, total (T-Al)	mg/L	-	-	-	3.93
Antimony, total (T-Sb)	mg/L	-	0.27 [4]	-	0.0013
Arsenic, total (T-As)	mg/L	0.0125	0.0125	-	0.00452
Barium, total (T-Ba)	mg/L	-	-	-	0.034
Beryllium, total (T-Be)	mg/L	0.1	-	-	0.000077
Boron, total (T-B)	mg/L	1.2	-	-	0.097
Cadmium, total (T-Cd)	mg/L	0.00012	-	-	<0.000110
Chromium, total (T-Cr)	mg/L	-	-	-	0.00251
Cobalt, total (T-Co)	mg/L	-	-	-	0.00114
Copper, total (T-Cu)	mg/L	- [2]	- [2]	0.0043	0.00778
Iron, total (T-Fe)	mg/L	-	-	-	2.95
Lead, total (T-Pb)	mg/L	- [2]	- [2]	0.0035	0.00671
Manganese, total (T-Mn)	mg/L	-	-	-	0.0988
Mercury, total (T-Hg)	mg/L	0.000016 [5]	-	-	***0.000039***
Molybdenum, total (T-Mo)	mg/L	-	-	-	0.112
Nickel, total (T-Ni)	mg/L	0.0083	-	-	0.00165
Selenium, total (T-Se)	mg/L	0.002	-	-	0.000586
Silver, total (T-Ag)	mg/L	0.0005	0.0037	-	0.000024
Thallium, total (T-Tl)	mg/L	-	-	-	0.000048
Uranium, total (T-U)	mg/L	-	-	-	0.0135
Vanadium, total (T-V)	mg/L	- [2]	-	0.0081	0.011
Zinc, total (T-Zn)	mg/L	- [2]	- [2]	0.0133	0.0201
Hexavalent Chromium, total	mg/L	0.0015	-	-	<0.00050
Dissolved Metals					
Cadmium, dissolved (D-Cd)	mg/L	-	-	-	<0.0000300
Copper, dissolved (D-Cu)	mg/L	-	-	-	0.00138
Iron, dissolved (D-Fe)	mg/L	-	-	-	<0.020
Lead, dissolved (D-Pb)	mg/L	-	-	-	<0.000100
Manganese, dissolved (D-Mn)	mg/L	-	-	-	0.0044
Nickel, dissolved (D-Ni)	mg/L	-	-	-	<0.00100
Strontium, dissolved (D-Sr)	mg/L	-	-	-	0.153
Vanadium, dissolved (D-V)	mg/L	-	-	-	0.00543
Zinc, dissolved (D-Zn)	mg/L	-	-	-	<0.0020
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	-	-	-	0.000017
Benzo(a)pyrene	mg/L	0.00001	-	-	***0.0000157***
Chrysene	mg/L	0.0001	-	-	<0.000019
Fluoranthene	mg/L	-	-	-	0.000031
Fluorene	mg/L	0.012	-	-	<0.000010
1-methylnaphthalene	mg/L	0.001	-	-	<0.000010
2-methylnaphthalene	mg/L	0.001	-	-	<0.000010
Naphthalene	mg/L	0.001	-	-	<0.000050
Phenanthrene	mg/L	-	-	-	<0.000020
Pyrene	mg/L	-	-	-	0.000032
Quinoline	mg/L	-	-	-	<0.000050
Volatile Organic Compounds (VOCs)					
Benzene	mg/L	0.11	-	-	<0.00050
Ethylbenzene	mg/L	0.25	-	-	<0.00050
Methyl-tert-butyl-ether	mg/L	5	0.44	-	<0.00050
Styrene	mg/L	-	-	-	<0.00050
Toluene	mg/L	0.215	-	-	<0.00040
Total Xylenes	mg/L	-	-	-	<0.00050
Chlorobenzene	mg/L	0.025	-	-	<0.00050
1,2-Dichlorobenzene	mg/L	0.042	-	-	<0.00050

Notes:
Results ***underlined in bold italics*** exceed the applicable long-term water quality guideline for the protection of marine water aquatic life.
Shaded results exceed the applicable short-term water quality guideline for the protection of marine water aquatic life.
Results in orange text exceed the PE-111578 West Sedimentation Pond Discharge Limit.
The West Catchment did not discharge during the monitoring period (June 8 – 14).
[1] The lowest applicable guidelines from approved or working BC WQGs, Canadian (CCME) WQGs and Federal WQGs.
[2] The WQG was not evaluated for parameters with discharge limits.
[3] The BC WQG for total ammonia is salinity, pH and temperature dependent; see Tables 27E and 27F in BC WQG guidance document.
[4] The working BC WQG for trivalent antimony [SB(III)] is 0.27 mg/L and is applied to total antimony results.
[5] When MeHg ≤0.5% of total Hg, the BC WQG = 0.00002 mg/L. The Canadian WQG = 0.000016 mg/L.
[6] The PE-111578 discharge limit for TSS is 25 mg/L under dry conditions and 75 mg/L for each day of Wet Conditions.

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

Parameter	Unit	Lowest Applicable Guideline [1]		PE-111578 Discharge Limit	Station SP-W-OUT Effluent SP-W-OUT VA25B3494-001 2025-06-06 12:13	Station W500GPM-OUT Effluent W500GPM-OUT VA25B4066-002 2025-06-12 17:10
		Long Term	Short Term			
General Parameters						
pH - Field	pH units	- [2]	-	5.5 - 9.0	8.3	8.0
Specific Conductivity - Field	µS/cm	-	-	-	1573	1609
Temperature - Field	°C	-	-	-	23.0	21.9
Salinity - Field	ppt	-	-	-	0.79	0.81
Turbidity - Field	NTU	-	-	-	2.7	5.9
TSS	mg/L	-	-	25 or 75 [6]	3.7	4.0
Dissolved Oxygen - Field	mg/L	≥8	-	-	***7.89***	9.26
Anions and Nutrients						
Sulphate	mg/L	-	-	-	-[7]	557
Chloride	mg/L	-	-	-	-[7]	20.3
Fluoride	mg/L	-	1.5	-	-[7]	0.252
Ammonia (N-NH_3)	mg/L	0.62-0.97 [3]	4.2-6.4 [3]	-	-[7]	0.0235
Nitrite (N-NO_2)	mg/L	-	-	-	-[7]	0.0349
Nitrate (N-NO_3)	mg/L	3.7	339	-	-[7]	0.321
Total Metals						
Aluminum, total (T-Al)	mg/L	-	-	-	0.170	0.411
Antimony, total (T-Sb)	mg/L	-	0.27 [4]	-	0.00114	0.00121
Arsenic, total (T-As)	mg/L	0.0125	0.0125	-	0.00158	0.0031
Barium, total (T-Ba)	mg/L	-	-	-	0.00441	0.00666
Beryllium, total (T-Be)	mg/L	0.1	-	-	<0.000020	<0.000040
Boron, total (T-B)	mg/L	1.2	-	-	0.026	0.09
Cadmium, total (T-Cd)	mg/L	0.00012	-	-	<0.0000300	<0.0000300
Chromium, total (T-Cr)	mg/L	-	-	-	<0.00050	<0.00100
Cobalt, total (T-Co)	mg/L	-	-	-	<0.00010	<0.00020
Copper, total (T-Cu)	mg/L	- [2]	- [2]	0.0043	0.00112	0.00211
Iron, total (T-Fe)	mg/L	-	-	-	0.081	0.169
Lead, total (T-Pb)	mg/L	- [2]	- [2]	0.0035	0.000378	0.000785
Manganese, total (T-Mn)	mg/L	-	-	-	0.00293	0.014
Mercury, total (T-Hg)	mg/L	0.000016 [5]	-	-	0.0000021	0.00000881
Molybdenum, total (T-Mo)	mg/L	-	-	-	0.115	0.112
Nickel, total (T-Ni)	mg/L	0.0083	-	-	0.00063	<0.00100
Selenium, total (T-Se)	mg/L	0.002	-	-	0.00042	0.000576
Silver, total (T-Ag)	mg/L	0.0005	0.0037	-	<0.000010	<0.000020
Thallium, total (T-Tl)	mg/L	-	-	-	0.00003	0.000027
Uranium, total (T-U)	mg/L	-	-	-	0.0219	0.012
Vanadium, total (T-V)	mg/L	- [2]	-	0.0081	0.00199	0.00466
Zinc, total (T-Zn)	mg/L	- [2]	- [2]	0.0133	0.0048	<0.0060
Hexavalent Chromium, total	mg/L	0.0015	-	-	-[7]	<0.00050
Dissolved Metals						
Cadmium, dissolved (D-Cd)	mg/L	-	-	-	<0.0000250	<0.0000300
Copper, dissolved (D-Cu)	mg/L	-	-	-	0.00084	0.00146
Iron, dissolved (D-Fe)	mg/L	-	-	-	0.025	<0.020
Lead, dissolved (D-Pb)	mg/L	-	-	-	0.000117	0.000112
Manganese, dissolved (D-Mn)	mg/L	-	-	-	0.00066	0.00142
Nickel, dissolved (D-Ni)	mg/L	-	-	-	<0.00050	<0.00100
Strontium, dissolved (D-Sr)	mg/L	-	-	-	0.163	0.149
Vanadium, dissolved (D-V)	mg/L	-	-	-	0.00178	0.00391
Zinc, dissolved (D-Zn)	mg/L	-	-	-	0.0020	<0.0020
Polycyclic Aromatic Hydrocarbons (PAHs)						
Acenaphthene	mg/L	0.006	-	-	-[7]	<0.000010
Acridine	mg/L	-	-	-	-[7]	<0.000010
Anthracene	mg/L	-	-	-	-[7]	<0.000010
Benz(a)anthracene	mg/L	-	-	-	-[7]	<0.000010
Benzo(a)pyrene	mg/L	0.00001	-	-	-[7]	<0.0000050
Chrysene	mg/L	0.0001	-	-	-[7]	<0.000010
Fluoranthene	mg/L	-	-	-	-[7]	<0.000010
Fluorene	mg/L	0.012	-	-	-[7]	<0.000010
1-methylnaphthalene	mg/L	0.001	-	-	-[7]	<0.000010
2-methylnaphthalene	mg/L	0.001	-	-	-[7]	<0.000010
Naphthalene	mg/L	0.001	-	-	-[7]	<0.000050
Phenanthrene	mg/L	-	-	-	-[7]	<0.000020
Pyrene	mg/L	-	-	-	-[7]	<0.000010
Quinoline	mg/L	-	-	-	-[7]	<0.000050
Volatile Organic Compounds (VOCs)						
Benzene	mg/L	0.11	-	-	-[7]	<0.00050
Ethylbenzene	mg/L	0.25	-	-	-[7]	<0.00050
Methyl-tert-butyl-ether	mg/L	5	0.44	-	-[7]	<0.00050
Styrene	mg/L	-	-	-	-[7]	<0.00050
Toluene	mg/L	0.215	-	-	-[7]	<0.00040
Total Xylenes	mg/L	-	-	-	-[7]	<0.00050
Chlorobenzene	mg/L	0.025	-	-	-[7]	<0.00050
1,2-Dichlorobenzene	mg/L	0.042	-	-	-[7]	<0.00050

Notes:
Results ***underlined in bold italics*** exceed the applicable long-term water quality guideline for the protection of marine water aquatic life.
Shaded results exceed the applicable short-term water quality guideline for the protection of marine water aquatic life.
Results in orange text exceed the PE-111578 West Sedimentation Pond Discharge Limit.
The West Catchment did not discharge during the monitoring period (June 8 – 14).
[1] The lowest applicable guidelines from approved or working BC WQGs, Canadian (CCME) WQGs and Federal WQGs.
[2] The WQG was not evaluated for parameters with discharge limits.
[3] The BC WQG for total ammonia is salinity, pH and temperature dependent; see Tables 27E and 27F in BC WQG guidance document.
[4] The working BC WQG for trivalent antimony [SB(III)] is 0.27 mg/L and is applied to total antimony results.
[5] When MeHg ≤0.5% of total Hg, the BC WQG = 0.00002 mg/L. The Canadian WQG = 0.000016 mg/L.
[6] The PE-111578 discharge limit for TSS is 25 mg/L under dry conditions and 75 mg/L for each day of Wet Conditions.
[7] General parameters, hexavalent chromium, PAHs, and VOCs were not tested in the SP-W-OUT sample collected June 6 (as discussed in Report #67).

Table C-3: 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	VA25B1380-001	2025-05-15	0.132	1.04
SP-W-IN	Influent	SP-W-IN	VA25B2500-002	2025-05-28	0	1.34
Effluent						
W500GPM-OUT	Effluent	W500GPM-OUT	VA25B1380-002	2025-05-15	0.00120	0.765
W500GPM-OUT	Effluent	W500GPM-OUT	VA25B2500-001	2025-05-28	0	0.905

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-4: West Catchment Field Measurements Collected During the Monitoring Period (June 8 – 14).

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	2025-06-08 11:16	24.9	8.50	0.96	17.57	16.1	8.1	1892	No
SP-W-IN	Influent	2025-06-09 9:41	24.7	***7.82***	0.95	12.08	12.0	8.0	1876	No
SP-W-IN	Influent	2025-06-10 15:30	21.9	10.62	0.52	6.90	8.1	8.1	1050	No
SP-W-IN	Influent	2025-06-11 9:05	22.4	9.01	0.72	43.09	35.1	8.0	1429	No
SP-W-IN	Influent	2025-06-12 12:14	22.7	8.69	0.82	67.40	53.3	8.0	1621	No
SP-W-IN	Influent	2025-06-13 10:17	17.0	10.39	0.53	27.01	23.1	7.9	1056	Yes
SP-W-IN	Influent	2025-06-14 15:01	16.2	11.15	0.25	14.17	13.6	8.2	514	No
W500GPM-IN	Influent	2025-06-08 11:12	24.9	8.51	0.94	9.64	10.2	8.2	1861	No
W500GPM-IN	Influent	2025-06-09 9:44	24.8	8.06	0.91	8.33	9.2	8.1	1807	No
W500GPM-IN	Influent	2025-06-11 9:02	22.7	9.41	0.75	18.4	16.7	8.2	1498	No
W500GPM-IN	Influent	2025-06-12 17:07	21.4	9.2	0.82	47.76	38.6	8.0	1619	No
W500GPM-IN	Influent	2025-06-13 10:29	19.8	9.72	0.82	17.99	16.4	8.1	1615	No
W500GPM-IN	Influent	2025-06-14 15:13	16.2	11.51	0.25	8.21	9.1	8.3	512	No
Effluent [5]										
W500GPM-OUT	Effluent	2025-06-08 11:09	25.1	***7.69*** [7]	0.95	3.47	5.6	8.1	1867	No
W500GPM-OUT	Effluent	2025-06-09 9:49	24.8	***7.79*** [7]	0.91	3.02	5.3	8.0	1804	No
W500GPM-OUT	Effluent	2025-06-11 8:59	22.6	8.44	0.76	4.19	6.1	8.1	1505	No
W500GPM-OUT	Effluent	2025-06-12 17:10	21.9	9.26	0.81	5.9	7.4	8.0	1609	No
W500GPM-OUT	Effluent	2025-06-13 10:33	20.1	9.46	0.83	4.08	6.0	8.0	1633	No
W500GPM-OUT	Effluent	2025-06-14 15:09	16.8	10.52	0.25	2.55	4.9	8.0	515	No

Notes:
Results ***underlined in bold italics*** exceed the applicable long-term water quality guideline for the protection of marine water aquatic life.
Shaded results exceed the applicable short-term water quality guideline for the protection of marine water aquatic life.
Results in orange text 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] There was no discharge at the authorized discharge location (SP-W-OUT) during the monitoring period (June 8 – 14), therefore daily field measurements for SP-W-OUT were not collected on those days.
[6] The PE-111578 discharge limit for TSS is 25 mg/L under dry conditions and 75 mg/L for each day of Wet Conditions.
[7] Clarified effluent from the W500GPM TSS settling system was recirculated to the West Sedimentation Pond and there was no discharge from the pond to Howe Sound during the monitoring period (June 8 – 14).

Table C-5: West Catchment Daily Discharge Volumes for the Monitoring Period (June 8 – 14).

	West Sedimentation Pond Effluent	West TSS Settling System (W500GPM) Clarified Effluent (Station W500GPM-OUT)[3]	West TSS Settling System (ESC) Clarified Effluent (Station ESC-W-OUT)[4]	Water Reclaimed for Construction Purposes (Station W500GPM-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**	**m^3**
PE-111578 Discharge Limit	-	-	-	-	120	- [2]
Date						
2025-06-08	0	2097	0	147	0	0
2025-06-09	0	1777	0	141	0	0
2025-06-10	0	0	0	0	0	0
2025-06-11	0	2092	0	112	0	0
2025-06-12	0	2203	0	94	0	0
2025-06-13	0	2431	0	160	0	0
2025-06-14	0	2120	0	168	0	0

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] W500GPM clarified effluent is discharged to Howe Sound, recirculated to the West Sedimentation Pond or is reclaimed for construction purposes based on operational considerations. Therefore, the W500GPM clarified effluent volume may be higher than the volume discharged to Howe Sound at station SP-W-OUT. The W500GPM operated each day during the monitoring period (June 8 – 14) except June 10.
[4] The ESC system was not operational during the monitoring period (June 8 – 14).

Appendix D: Non-Contact Water Diversion Ditch Outlets Results

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

Parameter	Unit	Lowest Applicable Guideline [1, 2]		Station OUT-01	Station OUT-02
				Non-Contact Water Diversion Ditch Outlet	Non-Contact Water Diversion Ditch Outlet
				OUT-01	OUT-02
				VA25B2928-001	VA25B2928-002
		Long Term	Short Term	2025-06-01 17:20	2025-06-02 9:00
General Parameters					
pH - Field	pH units	6.5 - 9.0	-	***6.1***	6.9
Specific Conductivity - Field	µS/cm	-	-	16	58
Temperature - Field	°C	-	-	12.4	11.2
Salinity - Field	ppt	-	-	0.01	0.03
Turbidity - Field	NTU	-	-	1.22	1.18
TSS	mg/L	-	-	<3.0	<3.0
Dissolved Oxygen - Field	mg/L	>=8	>=5	9.99	10.66
Anions and Nutrients					
Sulphate [2]	mg/L	128	-	1.63	3.92
Chloride	mg/L	120	600	<0.50	0.89
Fluoride [2]	mg/L	-	0.40-0.72	<0.020	0.031
Ammonia ($N\text{-}NH_3$) [2]	mg/L	1.81-1.83	21.6-25.0	<0.0050	<0.0050
Nitrite ($N\text{-}NO_2$) [2]	mg/L	0.02	0.06	<0.0010	<0.0010
Nitrate ($N\text{-}NO_3$)	mg/L	3	32.8	0.0502	0.51
Total Metals					
Aluminum, total (T-Al) [2]	mg/L	0.022-0.079	-	***0.105***	***0.0944***
Antimony, total (T-Sb)	mg/L	0.074	-	<0.00010	<0.00010
Arsenic, total (T-As)	mg/L	0.005	-	<0.00010	0.00012
Barium, total (T-Ba)	mg/L	1	-	0.00385	0.00625
Beryllium, total (T-Be)	mg/L	0.00013	-	<0.000020	<0.000020
Boron, total (T-B)	mg/L	1.2	29	<0.010	0.011
Cadmium, total (T-Cd) [2]	mg/L	0.000036-0.000045	0.00012-0.00045	<0.0000050	0.0000118
Chromium, total (T-Cr) [4]	mg/L	0.001	-	<0.00050	<0.00050
Cobalt, total (T-Co)	mg/L	0.001	0.11	<0.00010	<0.00010
Copper, total (T-Cu)	mg/L	-	-	0.00074	0.00109
Iron, total (T-Fe)	mg/L	0.3	1	0.033	0.017
Lead, total (T-Pb)	mg/L	-	-	0.000067	0.000083
Manganese, total (T-Mn) [2]	mg/L	0.768	0.816	0.00243	0.00129
Mercury, total (T-Hg) [3]	mg/L	0.00002	-	0.00000161	0.00000176
Molybdenum, total (T-Mo)	mg/L	0.073	46	0.000314	0.00586
Nickel, total (T-Ni) [2]	mg/L	0.025	-	<0.00050	<0.00050
Selenium, total (T-Se)	mg/L	0.001	-	<0.000050	<0.000050
Silver, total (T-Ag)	mg/L	0.00012	-	<0.000010	<0.000010
Thallium, total (T-Tl)	mg/L	0.0008	-	<0.000010	<0.000010
Uranium, total (T-U)	mg/L	0.0085	0.033	0.000124	0.000412
Vanadium, total (T-V)	mg/L	0.12	-	<0.00050	<0.00050
Zinc, total (T-Zn)	mg/L	-	-	<0.0030	<0.0030
Hexavalent Chromium, total	mg/L	0.001	-	-	-
Dissolved Metals					
Cadmium, dissolved (D-Cd) [2]	mg/L	0.000027-0.000069	0.000038-0.000123	<0.0000050	0.0000142
Copper, dissolved (D-Cu) [2]	mg/L	0.00020-0.00028	0.00029-0.0018	***0.00066***	***0.00105***
Iron, dissolved (D-Fe)	mg/L	-	0.35	0.02	<0.010
Lead, dissolved (D-Pb) [2]	mg/L	0.0020-0.0026	-	<0.000050	0.000057
Manganese, dissolved (D-Mn) [2]	mg/L	0.29-0.35	1.97	0.00299	0.00117
Nickel, dissolved (D-Ni) [2]	mg/L	0.00060-0.00070	0.011	<0.00050	<0.00050
Strontium, dissolved (D-Sr)	mg/L	2.5	-	0.00916	0.0255
Vanadium, dissolved (D-V)	mg/L	-	-	<0.00050	<0.00050
Zinc, dissolved (D-Zn) [2]	mg/L	0.0079-0.0056	0.0098-0.014	0.0017	<0.0010
Polycyclic Aromatic Hydrocarbons (PAHs)					
Acenaphthene	mg/L	0.0058	-	-	-
Acridine	mg/L	0.003	-	-	-
Anthracene	mg/L	0.000012	-	-	-
Benz(a)anthracene	mg/L	0.000018	-	-	-
Benzo(a)pyrene	mg/L	0.00001	-	-	-
Chrysene	mg/L	-	-	-	-
Fluoranthene	mg/L	0.00004	-	-	-
Fluorene	mg/L	0.003	-	-	-
1-methylnaphthalene	mg/L	-	-	-	-
2-methylnaphthalene	mg/L	-	-	-	-
Naphthalene	mg/L	0.001	0.001	-	-
Phenanthrene	mg/L	0.0003	-	-	-
Pyrene	mg/L	0.00002	-	-	-
Quinoline	mg/L	0.0034	-	-	-
Volatile Organic Compounds (VOCs)					
Benzene	mg/L	0.04	-	-	-
Ethylbenzene	mg/L	0.09	-	-	-
Methyl-tert-butyl-ether	mg/L	10	3.4	-	-
Styrene	mg/L	0.072	-	-	-
Toluene	mg/L	0.0005	-	-	-
Total Xylenes	mg/L	0.03	-	-	-
Chlorobenzene	mg/L	-	-	-	-
1,2-Dichlorobenzene	mg/L	-	-	-	-

Notes:
Results ***underlined in bold italics*** exceed the applicable long-term water quality guideline for the protection of freshwater aquatic life.
Shaded results exceed the applicable short-term water quality guideline for the protection of freshwater aquatic life.
[1] The lowest applicable guidelines from approved or working BC WQGs, Canadian (CCME) WQGs and Federal WQGs.
[2] BC WQG or CWQG indicated to be variable are calculated from sample-specific measurements for temperature, field pH, total hardness and dissolved organic carbon (DOC) content.
[3] When MeHg $\leqslant$ 0.5% of total Hg, BC WQG = 0.00002 mg/L.
[4] The approved BC WQG for hexavalent chromium [Cr(VI)] is 0.001 mg/L and 0.0089 mg/L for trivalent chromium [Cr(III)]. The more conservative criteria for Cr(VI) is applied to total chromium results.
The lowest applicable guidelines are shown in the table; however, water quality data was screened to all applicable guidelines.

Appendix E: Marine Water Receiving Environment Results

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

Parameter	Unit	Lowest Applicable Guideline [1]		Station IDZ-E1			Station IDZ-E2		
				0.5 m Below Surface	2 m Below Surface	2 m Above Seafloor	0.5 m Below Surface	2 m Below Surface	2 m Above Seafloor
				IDZ-E1-0.5	IDZ-E1-2m	IDZ-E1-SF	IDZ-E2-0.5	IDZ-E2-2m	IDZ-E2-SF
				VA25B3041-001	VA25B3041-002	VA25B3041-003	VA25B3041-004	VA25B3041-005	VA25B3041-006
		Long Term	Short Term	2025-06-03 8:57	2025-06-03 8:55	2025-06-03 8:52	2025-06-03 9:12	2025-06-03 9:10	2025-06-03 9:05
General Parameters									
pH - Field	pH units	7.0 - 8.7	-	7.81	7.84	7.66	7.70	7.94	7.58
Specific Conductivity - Field	µS/cm	-	-	3728	21127	46043	4520	21794	46818
Temperature - Field	℃	-	-	10.5	10.7	10.0	10.6	10.8	9.5
Salinity - Field	ppt	Narrative [2]	-	1.98	12.67	29.70	2.42	13.11	30.22
Turbidity - Field	NTU	Narrative [2]	Narrative [2]	24.51	12.04	1.78	22.61	9.69	2.14
TSS	mg/L	Narrative [2]	Narrative [2]	10.2	8.2	<2.0	10.7	6.5	9.8
Dissolved Oxygen - Field	mg/L	>=8	-	11.32	10.46	8.76	11.29	10.51	***7.73***

Notes:
Results ***underlined in bold italics*** exceed the applicable long-term water quality guideline for the protection of marine water aquatic life.
Shaded results exceed the applicable short-term water quality guideline for the protection of marine water aquatic life.
[1] The lowest applicable guidelines from approved or working BC WQGs, Canadian (CCME) WQGs and Federal WQGs.
[2] Narrative guideline for the evaluation of change from background conditions arising from discharges to the aquatic environment. Salinity WQG was not evaluated. The water quality data presented in the table were collected when the site was not discharging, therefore the turbidity and TSS WQGs were not evaluated.

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

Parameter	Unit	Lowest Applicable Guideline [1]		Station IDZ-W1			Station IDZ-W2		
				0.5 m Below Surface	2 m Below Surface	2 m Above Seafloor	0.5 m Below Surface	2 m Below Surface	2 m Above Seafloor
				IDZ-W1-0.5	IDZ-W1-2m	IDZ-W1-SF	IDZ-W2-0.5	IDZ-W2-2m	IDZ-W2-SF
				VA25B3041-007	VA25B3041-008	VA25B3041-009	VA25B3041-010	VA25B3041-011	VA25B3041-012
		Long Term	Short Term	2025-06-03 9:52	2025-06-03 9:47	2025-06-03 9:45	2025-06-03 10:07	2025-06-03 10:04	2025-06-03 10:00
General Parameters									
pH - Field	pH units	7.0 - 8.7	-	7.74	8.01	7.45	7.84	7.93	7.46
Specific Conductivity - Field	µS/cm	-	-	3252	31065	48799	9243	33408	48907
Temperature - Field	℃	-	-	10.3	11.3	8.7	10.6	11.1	8.7
Salinity - Field	ppt	Narrative [2]	-	1.71	19.30	31.57	5.20	20.97	31.65
Turbidity - Field	NTU	Narrative [2]	Narrative [2]	17.97	4.65	1.44	13.71	4.33	0.99
TSS	mg/L	Narrative [2]	Narrative [2]	8.6	7.5	<2.0	7.2	6.2	<2.0
Dissolved Oxygen - Field	mg/L	>=8	-	11.47	10.17	***6.73***	11.15	9.82	***6.75***

Notes:
Results ***underlined in bold italics*** exceed the applicable long-term water quality guideline for the protection of marine water aquatic life.
Shaded results exceed the applicable short-term water quality guideline for the protection of marine water aquatic life.
[1] The lowest applicable guidelines from approved or working BC WQGs, Canadian (CCME) WQGs and Federal WQGs.
[2] Narrative guideline for the evaluation of change from background conditions arising from discharges to the aquatic environment. Salinity WQG was not evaluated. The water quality data presented in the table were collected when the site was not discharging, therefore the turbidity and TSS WQGs were not evaluated.