

TECHNICAL MEMORANDUM

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Project #: A633-9

Subject: PE-111578 Weekly Discharge and Compliance Report #60 for April 13 – 19

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 #60) was prepared by Lorax Environmental and summarizes WDA monitoring conducted for the period of April 13 – 19. 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 #60 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 C 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. Early-stage civil works are ongoing, and these include site grading, levelling, overburden and bedrock excavation, pouring of concrete foundations and construction of contact water management facilities. Shoring works along the foreshore areas were initiated in December 2023, and in early 2024 construction of water management infrastructure commenced and has continued through the April 13 – 19, 2025 monitoring period. Land-based construction occurs within two areas east and west of Mill Creek, referred to as the East and West Catchments, respectively. Non-contact water is intercepted and diverted around the construction areas to Howe Sound and Mill Creek. Stormwater runoff collected within the East and West catchment areas (7.12 and 5.92 ha, respectively) is managed as site contact water and is conveyed to the East Wastewater Treatment Plant (WWTP) or the East and West Sedimentation Ponds for treatment or settling of suspended particulate. Discharge to Howe Sound from the East and West Sedimentation Ponds commenced April and October 2024, respectively.

Non-contact water diversion ditches west of Mill Creek have been upgraded and discharge to Mill Creek at station OUT-06, or to Howe Sound at station OUT-02 (Appendix A, Figure 1). During heavy precipitation non-contact water from the diversion ditches is also conveyed to Howe Sound via station OUT-01. East of Mill Creek, non-contact water is diverted around the East Catchment along pre-existing road ditches that flow to East Creek or Mill Creek. To facilitate the replacement of the East Creek discharge culvert at OUT-12 (station SW-04), the lower reach of East Creek was temporarily diverted to an adjacent culvert, OUT-11, on September 17, 2024.

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

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

TSS settling system (E500GPM) for the East Sedimentation Pond was commissioned on December 4, 2024, also with 2,725 m³/day installed capacity.

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

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

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

1.2 Weather and Water Management

A mix of sunny and cloudy conditions were observed during the monitoring period (April 13 – 19), 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
2025-04-13	0	14.1	3	Mix of sun and cloud
2025-04-14	0	15.4	6.6	Mix of sun and cloud
2025-04-15	0	16.7	6.4	Mix of sun and cloud
2025-04-16	0	20	5.6	Mix of sun and cloud
2025-04-17	0	17.6	5.3	Mix of sun and cloud
2025-04-18	0	17.5	6.1	Mix of sun and cloud
2025-04-19	0	15.1	7.2	Mix of sun and cloud

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

From April 13 – 19, the East Sedimentation Pond received non-contaminated contact water from Area 1200-D pump and Area 1100 sump (Appendix A, Figure 2). Non-contaminated contact waters from Area 4100 sump, Area 4200 sump, and the 8-Plex sump were directed to the West Sedimentation Pond (Appendix A, Figure 3).

Routine operation of the East WWTP continued during the monitoring period (April 13 – 19) except on April 14, 15, 16, and 17, when the system was offline for maintenance. 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 on April 13, 18, and 19 during the monitoring period (April 13 – 19). A portion of the pond water clarified through the E500GPM system was recirculated to the East Sedimentation Pond on April 13 and 16. A total of 520 m³ of East Sedimentation Pond effluent clarified through the TSS settling system (E500GPM) was directed to the authorized discharge location SP-E-OUT during the monitoring period. Daily water volumes processed by the East WWTP and the East TSS settling system (E500GPM), and volumes discharged to Howe Sound from the East Catchment authorized discharge location (SP-E-OUT) are provided in Appendix B (Table B-4).

In the West Catchment, during April 13 to 15 the 4200 Surge Pond was drained and in-filled as part of site preparations for the next stages of construction (Appendix A, Figure 3). To allow access to the marine offloading facility adjacent to the East Sedimentation Pond, the East and West TSS settling systems will be consolidated into a single system located adjacent to the West Sedimentation Pond. The consolidation will result in a capacity upgrade for the TSS settling systems, and the planned modifications have been communicated to BCER.

West Sedimentation Pond water was clarified through the W500GPM TSS settling systems prior to discharge. The ESC system was not operational during the monitoring period. A portion of the pond water clarified through the W500GPM settling system was recirculated to the West Sedimentation Pond on April 16. A total of 1,167 m³ of effluent was clarified through the W500GPM system and directed to the SP-W-OUT discharge location during the monitoring period. Daily clarified effluent volumes from the TSS settling systems, and volumes discharged to Howe Sound from the West Catchment authorized discharge location (SP-W-OUT) are provided in Appendix C (Table C-4).

2. Monitoring Summary

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

Compliance and supplementary monitoring stations have been established:

- Non-contact diversion ditch outlet monitoring stations (OUT-01, OUT-02, OUT-06, and OUT-11). East Creek water was temporarily diverted to OUT-11 on September 17 and is monitored at the inlet to temporary diversion (station SW-04), therefore OUT-11 is not currently monitored.
- Creek water monitoring stations for Woodfibre, Mill and East Creek (SW-01, SW-02, SW-03, SW-04, SW-07).
- Contact water monitoring locations (SP-E-IN, SP-E-NE, SP-E-NW, E500GPM-IN, E500GPM-OUT, WWTP-E-IN, WWTP-E-OUT, SP-W-IN, SP-W-W, SP-W-E, ESC-W-IN, ESC-W-OUT, W500GPM-IN and W500GPM-OUT).
- Effluent compliance stations (SP-E-OUT and SP-W-OUT).
- Howe Sound reference and IDZ monitoring stations (WQR1, WQR2, IDZ-E1, IDZ-E2, IDZ-W1, and IDZ-W2).

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

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

Water quality was monitored at stations OUT-02, SW-01, SW-04, IDZ-E1, IDZ-E2, IDZ-W1, IDZ-W2, WQR1, WQR2, WWTP-E-IN, WWTP-E-OUT, SP-E-IN, SP-E-OUT, E500GPM-IN, E500GPM-OUT, SP-W-IN, SP-W-OUT, W500GPM-IN, and W500GPM-OUT during the monitoring period (April 13 – 19). Sampling dates and parameters tested are summarized in Table 2.

Overall, the PE-111578 monitoring requirements that were applicable during the monitoring period (April 13 – 19) were met.

Daily field parameters were not collected at the influent and effluent stations of the East WWTP (WWTP-E-IN and WWTP-E-OUT) from April 14 through 18 as it was not operational at the time of monitoring. Daily field parameters and a weekly analytical sample were not collected at the influent and effluent stations of the West WWTP (WWTP-W-IN and WWTP-W-OUT, respectively) as it was not operational during the monitoring period.

Table 2: Summary of PE-111578 Monitoring Samples Collected April 13 – 19.

Sampling Date	Sample	Description	Parameters Tested	Monitoring Frequency
April 13, 2025	SP-E-IN	East Sedimentation Pond influent entering the pond and collected at cell 1	Field Parameters.	D
	SP-E-OUT	East Sedimentation Pond clarified effluent discharge to Howe Sound, collected at the manhole adjacent to the outfall	Field Parameters.	D
	WWTP-E-IN	East WWTP at the influent meter box	Field Parameters.	D
	WWTP-E-OUT	East WWTP at the effluent meter box		
	E500GPM-IN	East Sedimentation Pond 500 GPM TSS settling system at the influent meter box	Field Parameters.	P
	E500GPM-OUT	East Sedimentation Pond 500 GPM TSS settling system at the effluent meter box		
	SP-W-IN	West Sedimentation Pond influent entering the pond and collected at cell 1	Field Parameters.	D
	SW-01	Lower Reach of Woodfibre Creek (near the mouth)	Field, Physical & General Parameters, VH & BTEX, EPHs & PAHs, Total, Dissolved and Speciated Metals, VOCs, Methylmercury, Dioxins & Furans.	M ₅
	SW-04	Lower Reach of East Creek (near the outlet to the outfall culvert)		
	IDZ-W1-0.5	Howe Sound IDZ station W1; 0.5 m below surface	Field, Physical & General Parameters, VH & BTEX, EPHs & PAHs, Total, Dissolved and Speciated Metals, VOCs, Methylmercury, Dioxins & Furans	M ₅
	IDZ-W1-2m	Howe Sound IDZ station W1; 2 m below surface		
	IDZ-W1-SF	Howe Sound IDZ station W1; 2 m above the seafloor		
	IDZ-W2-0.5	Howe Sound IDZ station W2; 0.5 m below surface		
	IDZ-W2-2m	Howe Sound IDZ station W2; 2 m below surface		
	IDZ-W2-SF	Howe Sound IDZ station W2; 2 m above the seafloor		
	WQR2-0.5	Reference site 2; 0.5 m below surface		
	WQR2-2m	Reference site 2; 2 m below surface		
	WQR2-SF	Reference site 2; 2 m above the seafloor		
April 14, 2025	SP-E-IN	East Sedimentation Pond influent entering the pond and collected at cell 1	Field Parameters.	D
	SP-W-IN	West Sedimentation Pond influent entering the pond and collected at cell 1	Field Parameters.	D
	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 ₅
	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		
April 15, 2025	SP-E-IN	East Sedimentation Pond influent entering the pond and collected at cell 1	Field Parameters.	D
	SP-W-IN	West Sedimentation Pond influent entering the pond and collected at cell 1	Field Parameters.	D
April 16, 2025	SP-E-IN	East Sedimentation Pond influent entering the pond and collected at cell 1	Field, Physical & General Parameters, VH & BTEX, EPHs & PAHs, Total, Dissolved and Speciated Metals, VOCs, Methylmercury, Dioxins & Furans.	D, W ₁ , W ₂
	SP-E-OUT	East Sedimentation Pond clarified effluent discharge to Howe Sound, collected at the manhole adjacent to the outfall	Field, Physical & General Parameters, VH & BTEX, EPHs & PAHs, Total, Dissolved and Speciated Metals, VOCs, Methylmercury, Dioxins & Furans.	D, W ₁ , W ₂
	E500GPM-IN	East Sedimentation Pond 500 GPM TSS settling system at the influent meter box	Field Parameters.	P
	E500GPM-OUT	East Sedimentation Pond 500 GPM TSS settling system at the effluent meter box		
	SP-W-IN	West Sedimentation Pond influent entering the pond and collected at cell 1	Field, Physical & General Parameters, VH & BTEX, EPHs & PAHs, Total, Dissolved and Speciated Metals, VOCs, Methylmercury, Dioxins & Furans.	D, W ₁ , W ₂
	SP-W-OUT	West Sedimentation Pond clarified effluent discharge to Howe Sound, collected at sampling port	Field, Physical & General Parameters, VH & BTEX, EPHs & PAHs, Total, Dissolved and Speciated Metals, VOCs, Methylmercury, Dioxins & Furans.	D, W ₁ , W ₂
	W500GPM-IN	West Sedimentation Pond 500 GPM TSS settling system at the influent meter box	Field Parameters.	P
	W500GPM-OUT	West Sedimentation Pond 500 GPM TSS settling system at the effluent meter box		
	OUT-02	Non-contact water diversion ditch outlet	Field, Physical & General Parameters, Total, Dissolved and Speciated Metals, Methylmercury.	M ₅
April 17, 2025	SP-E-IN	East Sedimentation Pond influent entering the pond and collected at cell 1	Field Parameters.	D
	SP-W-IN	West Sedimentation Pond influent entering the pond and collected at cell 1	Field Parameters.	D
April 18, 2025	SP-E-IN	East Sedimentation Pond influent entering the pond and collected at cell 1	Field Parameters.	D
	SP-W-IN	West Sedimentation Pond influent entering the pond and collected at cell 1	Field Parameters.	D
April 19, 2025	SP-E-IN	East Sedimentation Pond influent entering the pond and collected at cell 1	Field Parameters.	D
	WWTP-E-IN	East WWTP at the influent meter box	Field, Physical & General Parameters, VH & BTEX, EPHs & PAHs, Total, Dissolved and Speciated Metals, VOCs, Methylmercury, Dioxins & Furans.	D, W ₁ , W ₂
	WWTP-E-OUT	East WWTP at the effluent meter box		
	SP-W-IN	West Sedimentation Pond influent entering the pond and collected at cell 1	Field Parameters.	D

Notes:

Monitoring frequency requirements under PE-111578 are indicated as follows:
D – daily monitoring of field parameters at WWTP and sedimentation pond influent and effluent stations.
M – monthly monitoring for all parameters at WWTP, sedimentation pond and receiving environment stations.
M₅ – spring high frequency (5-in-30) sampling for receiving environment stations.
W₁ – initial high frequency monitoring for physical parameters at WWTP and sedimentation pond influent and effluent stations.
W₂ – initial high frequency monitoring for all parameters at WWTP and sedimentation pond influent and effluent stations.
W₃ – initial high frequency monitoring for physical parameters at IDZ stations.
P – periodic monitoring for targeted parameters that is supplementary to PE-111578 requirements.

3. Water Quality Results

3.1 Screening and Reporting Overview

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

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

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

3.2 Summary of Reported Results

Field measurements and analytical results reported for samples collected during the monitoring period (April 13 – 19) are listed below in Table 3. Testing for methylmercury, dioxins and furans typically requires up to four weeks to complete. Analytical results not reported will be included in future weekly reports. Reporting of results is pending for the following samples and parameters:

- SP-W-IN and SP-W-OUT collected March 5 (dioxins and furans)
- SP-E-IN, SP-E-OUT, WWTP-E-IN, WWTP-E-OUT, SP-W-IN, and SP-W-OUT collected March 11 (dioxins and furans)
- IDZ-W1, IDZ-W2, and WQR2 collected March 12 (dioxins and furans)
- SP-E-IN, SP-E-OUT, WWTP-E-IN, and WWTP-E-OUT collected March 17 (dioxins and furans)
- SP-W-IN and SP-W-OUT collected March 18 (dioxins and furans)
- SP-E-IN, SP-E-OUT, WWTP-E-IN, WWTP-E-OUT, SP-W-IN, and SP-W-OUT collected March 24 (dioxins and furans)
- IDZ-E1, IDZ-E2, IDZ-W1, IDZ-W2, WQR1, WQR2 collected March 25 at 0.5 m below surface (chronic toxicity)
- SP-W-IN and SP-W-OUT collected March 31 (dioxins and furans)
- SP-E-IN, SP-E-OUT, WWTP-E-IN, and WWTP-E-OUT collected April 1 (methylmercury, dioxins and furans)
- SW-01, SW-02, SW-03, SW-04, and SW-07 collected April 2 (field and all analytical parameters)
- OUT-02 collected April 6 (field and all analytical parameters)
- OUT-01 and OUT-06 collected April 7 (field and all analytical parameters)
- SW-02, SW-03, SW-07 collected April 7 (field and all analytical parameters)
- SW-01 and SW-04 collected April 8 (field and all analytical parameters)
- IDZ-W1 and IDZ-W2 collected April 8 (field and all analytical parameters)
- SP-E-IN, SP-E-OUT, WWTP-E-IN, WWTP-E-OUT, SP-W-IN, and SP-W-OUT collected April 9 (methylmercury, dioxins and furans)
- IDZ-E1 and IDZ-E2 collected April 10 (field and all analytical parameters)
- OUT-01, OUT-02, and OUT-06 collected April 11 (field and all analytical parameters)

- WQR1 and WQR2 collected April 11 (field and all analytical parameters)
- SW-02, SW-03, and SW-07 collected April 12 (field and all analytical parameters)
- SW-01 and SW-04 collected April 13 (field and all analytical parameters)
- IDZ-W1, IDZ-W2, WQR2 collected April 13 (field and all analytical parameters)
- IDZ-E1, IDZ-E2, WQR1 collected April 14 (field and all analytical parameters)
- SP-E-IN, SP-E-OUT, SP-W-IN, SP-W-OUT collected April 16 (methylmercury, dioxins and furans)
- OUT-02 collected April 16 (field and all analytical parameters)
- WWTP-E-IN and WWTP-E-OUT collected April 19 (methylmercury, dioxins and furans)

Table 3: Summary of Analytical Results Included in Weekly Discharge and Compliance Report #60.

Sample	Description	Sampling Date	Parameters Reported
SP-E-IN	East Sedimentation Pond influent entering the pond and collected at cell 1	April 16, 2025	Field, Physical and General Parameters, Total and Dissolved Metals, Hexavalent Chromium, PAHs, and VOCs.
SP-E-OUT	East Sedimentation Pond clarified effluent discharge to Howe Sound, collected at the manhole adjacent to the outfall		
SP-W-IN	West Sedimentation Pond influent entering the pond and collected at cell 1		
SP-W-OUT	West Sedimentation Pond clarified effluent discharge to Howe Sound, collected at sampling port		
WWTP-E-IN	East WWTP at the influent meter box	April 19, 2025	Field, Physical and General Parameters, Total and Dissolved Metals, Hexavalent Chromium, PAHs, and VOCs.
WWTP-E-OUT	East WWTP 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 (April 13 – 19), clarified water from the East Sedimentation Pond TSS settling system (E500GPM) discharged to Howe Sound at the authorized discharge location (station SP-E-OUT) on April 13 and 16. Daily clarified effluent volumes, East WWTP treated effluent volumes, and discharge volumes from the East Catchment are summarized in Appendix B, Table B-4.

Field measurements were collected April 13 – 19 at multiple influent and effluent locations, as outlined in Section 2, and are tabulated in Appendix B, Table B-3. Analytical samples collected on April 16 (stations SP-E-IN and SP-E-OUT) and April 19 (stations WWTP-E-IN, and WWTP-E-OUT) were available at the time of reporting. Screening results for East Catchment contact water quality are tabulated in Table B-1 and Table B-2 of Appendix B.

During the monitoring period (April 13 – 19), field measurements and analytical results collected at station SP-E-OUT met PE-111578 discharge limits and WQGs.

3.4 West Catchment

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

discharged to Howe Sound and results received for methylmercury, dioxins and furans are summarized below.

During the monitoring period (April 13 – 19), the TSS settling system (W500GPM) treated water stored in the West Sedimentation Pond on April 16 and produced clarified effluent that was discharged to Howe Sound at the authorized discharge location, SP-W-OUT. The smaller TSS settling system (ESC) was not operational during the monitoring period. Daily clarified effluent and discharge volumes from the West Catchment are summarized in Appendix C, Table C-4.

Field measurements were collected April 13 – 19 at multiple influent and effluent locations, as outlined in Section 2, and are tabulated in Appendix C, Table C-3. Analytical samples collected on April 16 (stations SP-W-IN and SP-W-OUT) were available at the time of reporting. Screening results for West Catchment contact water quality are tabulated in Table C-1 and Table C-2 of Appendix C.

During the monitoring period (April 13 – 19), field measurements and analytical results collected at station SP-W-OUT met PE-111578 discharge limits and WQGs.

3.5 Non-Contact Water Diversion Ditch Outlets

Non-contact water diversion ditch samples are screened against Canadian, Federal and BC WQGs for the protection of freshwater aquatic life. East Creek was temporarily diverted to OUT-11 on September 17 to facilitate replacement of the OUT-12 culvert through which East Creek previously discharged. Only East Creek water is flowing through the OUT-11 culvert. East Creek is monitored at freshwater receiving environment station SW-04 and station OUT-11 is not monitored while diversion is in place.

Analytical results were not reported for non-contact water diversion ditch outlet samples.

3.6 Freshwater and Estuarine Water Receiving Environment

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

Analytical results were not reported for freshwater and estuarine water samples.

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 D.

Analytical results were not reported for marine water samples.

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 (April 13 – 19, Report #60)		
Authorized Works and Monitoring Program Evaluation	The authorized works and monitoring stations have not been established as described in PE-111578.	The PE-111578 authorized works were under construction during the reporting period. The East and West Sedimentation Ponds and WWTPs have been constructed. The sedimentation pond conveyance ditches have not been constructed, and influent culverts have not been activated, and the associated influent monitoring stations have not been established. West Sedimentation Pond clarified water has been pumped through temporary hoses to the permanent outfall structure since December 2024 and pumping of East Sedimentation Pond to the permanent outfall structure commenced March 2025. Operation of the West WWTP has been suspended since September 25, 2024, and the plant has been repurposed to evaluate alternative treatment processes. The lower reach of East Creek has been temporarily diverted through OUT-11 outfall since September 17, 2024, to facilitate replacement of the East Creek outfall culvert (OUT-12). East Creek is monitored at SW-04 therefore monitoring at OUT-11 has been suspended. This item remains open.
Pending Data	Analytical results not reported.	Analytical results and field parameters for receiving environment and diversion ditch samples collected during the monitoring period (April 13 – 19) were not included with Report #60. Methylmercury, dioxins and furans results for contact water and treated water samples collected April 16 and 19 were not included with Report #60. The pending results will be included in future weekly reports when available. This item remains open.
Ongoing Items from Previous Weekly Reports		
Report #54: Pending Data	Analytical results not reported.	Dioxins and furans results for contact water samples collected March 5 were not included with Report #60. The pending results will be included in future weekly reports when available. This item remains open.
Report #55: Pending Data	Analytical results not reported.	Dioxins and furans results for contact water samples collected March 11 were not included with Report #60. The pending results will be included in future weekly reports when available. This item remains open.
Report #56: WWTP Performance Evaluation	Field pH, T-Cu, T-Hg, T-Zn, and hexavalent Cr above the MDO	<p>This item was first noted in Report #46 (January 8 sample) and has been updated with January 14 results (Report #47), January 24 and January 28 results (Report #49), February 5 and 6 results (Report #50), February 10 results (Report #51), February 15 and 20 results (Report #52), February 24 results (Report #53), March 8 results (Report #55), and March 17 results (Report #56). The total copper concentrations were 0.00809, 0.00595, 0.00895, 0.00518, 0.00542, 0.00525, and 0.00450 mg/L in samples collected at WWTP-E-OUT on January 8, 14, 24, 28, February 24, March 8, and 17 respectively, and ranged from 0.00613 to 0.0108 mg/L in four replicate samples collected on February 15. The total mercury concentrations were 0.0000355, 0.000185, 0.000223, and 0.0000882 mg/L in samples collected on January 24, 30, February 20 and 24, respectively, and were 0.0000615 and 0.0000644 mg/L in two replicate samples collected February 15. The total zinc concentrations were 0.0137, 0.0152, and 0.0156 mg/L in the samples collected on January 24, February 20 and 24, and were 0.0223 and 0.0234 mg/L in two of four replicate samples collected February 15. Hexavalent chromium concentrations were 0.00197 and 0.00166 mg/L in samples collected January 24 and 28 at WWTP- E-OUT. Field pH was 9.1, 9.2, and 9.6 in samples collected at WWTP-E-OUT on February 5, 6 and 10, respectively.</p> <p>The effluent discharged to Howe Sound at SP-E-OUT met the discharge limits on January 8. East WWTP effluent was routed to the pre-discharge holding tank and did not discharge to Howe Sound on January 14. East WWTP effluent has been directed to the East Sedimentation Pond since January 24.</p> <p>Review of possible causes has yielded inconclusive results. As of April 12, this item remains open until sufficient monitoring data are collected to indicate the issues are determined to be resolved.</p>
Report #56: Pending Data	Analytical results not reported.	Dioxins and furans results for contact water samples collected March 17 and 18 were not included with Report #60. The pending results will be included in future weekly reports when available. This item remains open.
Report #57: Pending Data	Analytical results not reported.	Dioxins and furans results for contact water samples collected March 24 and chronic toxicity results for marine receiving environment samples collected March 25 were not included with Report #60. The pending results will be included in future weekly reports when available. This item remains open.
Report #58: Pending Data	Analytical results not reported.	Analytical results for receiving environment samples collected April 2 were not included with Report #60. Methylmercury, dioxins and furans results for contact water samples collected March 31 (dioxins and furans only) and April 1 were not included with Report #60. The pending results will be included in future weekly reports when available. This item remains open.
Report #59: Pending Data	Analytical results not reported.	Analytical results for receiving environment samples collected April 6, 7, 8, 10, 11, and 12 were not included with Report #60. Methylmercury, dioxins and furans results for contact water samples collected April 9 were not included with Report #60. 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.

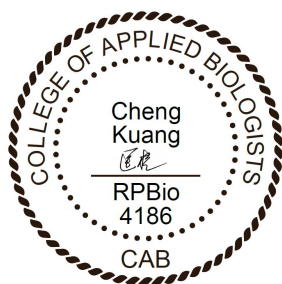
Potential project influence is an assessment that water quality at creek and Howe Sound baseline stations are above the baseline concentration range and may indicate project influence at these stations.

5. Closure

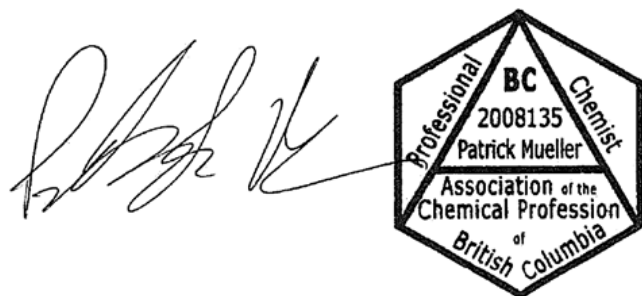
This weekly report is a desktop review by Lorax of the PE-111578 discharge and compliance monitoring program records, reports and results provided by Woodfibre LNG and prime contractor McDermott International and their sub-contractors. The records reviewed and analyzed by Lorax include ALS Environmental 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.



Cheng Kuang, M.Sc., RPBio.
Environmental Scientist



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

Appendix A: Figures and Site Images



World Imagery: District of Squamish. Additional imagery provided by McDermott International captured March 21st, 2025.

LEGEND

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

DATE SAVED: Apr 25, 2025
DRAWN BY: DM
REVIEWED: PM
VERSION: 1

Coordinate System: NAD 1983 UTM Zone 10N
Projection: Transverse Mercator
Datum: North American 1983
Units: Metre

1:6,000

0 50 100 150 Metres

CLIENT:



PROJECT:

Woodfibre LNG Project Construction Phase

TITLE: Completed or Under Construction Water Management Facilities and Established PE-111578 Monitoring Stations (April 19, 2025)

PROJECT #: A633-7

FIGURE: 1

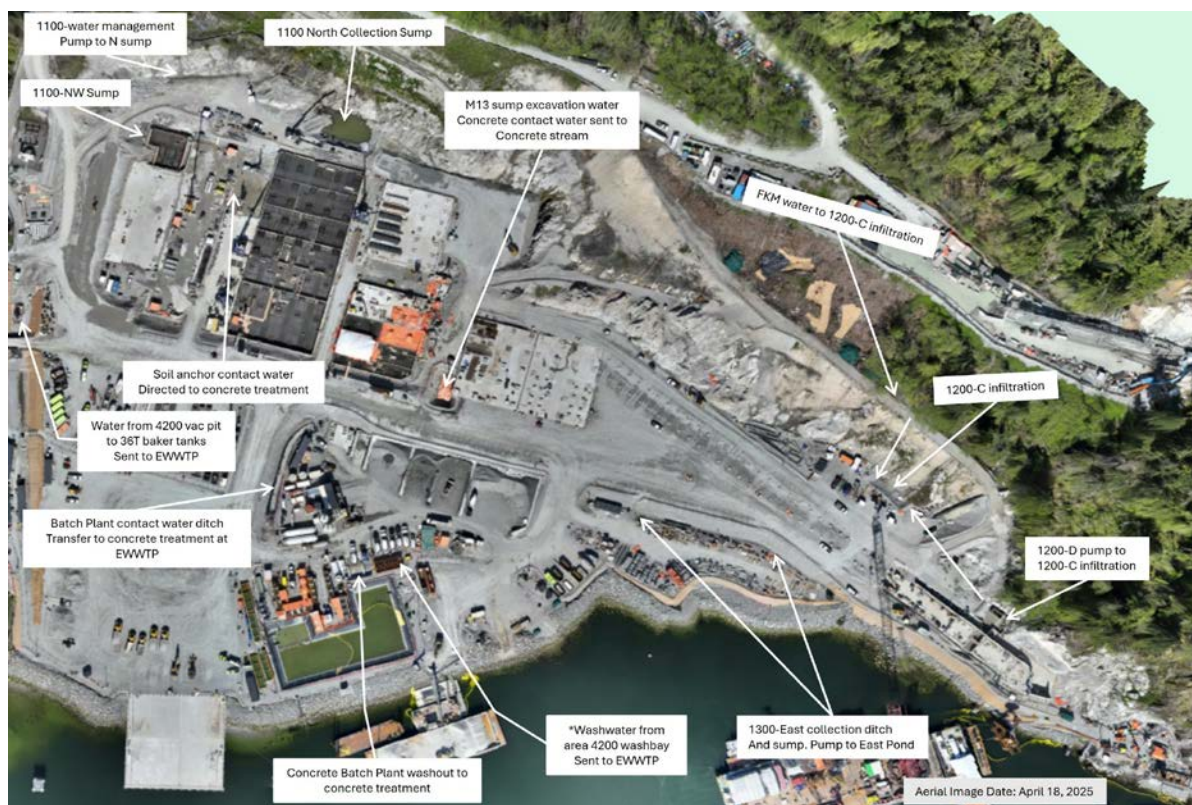


Figure 2: East Catchment contact water management facilities (April 13 – 19).

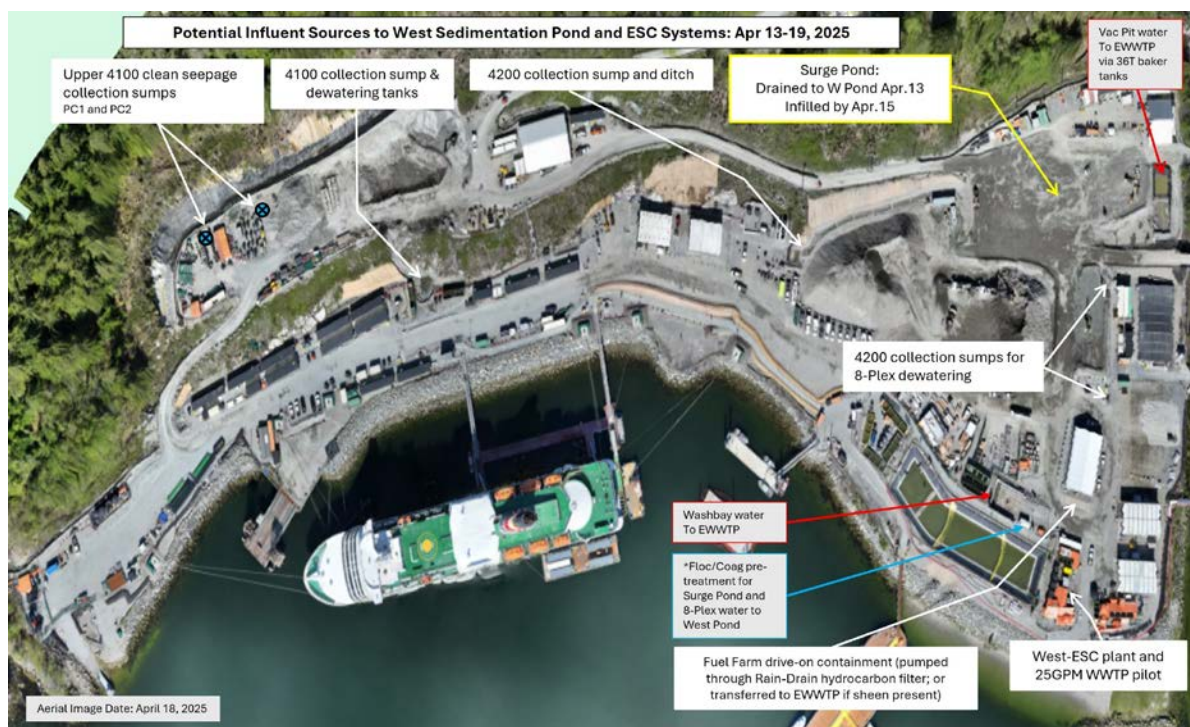


Figure 3: West Catchment contact water management facilities (April 13 – 19).



Figure 4: Aerial view of the East Sedimentation Pond (April 18, 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 (April 18, 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	Station WWTP-E-IN
					Influent	Influent
					SP-E-IN	WWTP-E-IN
		VA25A8533-001	VA25A8764-001			
		16/04/2025 11:30	19/04/2025 09:00			
General Parameters						
pH - Field	pH units	- ²	-	5.5 - 9.0	7.2	7.2
Conductivity - Field	µS/cm	-	-	-	709	784
Temperature - Field	°C	-	-	-	14	14.3
Salinity - Field	ppt	-	-	-	0.44	0.49
Turbidity - Field	NTU	-	-	-	26.46	8.03
TSS	mg/L	-	-	25 or 75 ⁶	12.9	7.5
Dissolved Oxygen - Field	mg/L	≥8	-	-	11.16	10.8
Anions and Nutrients						
Sulphate	mg/L	-	-	-	244	254
Chloride	mg/L	-	-	-	8.83	9.01
Fluoride	mg/L	-	1.5	-	0.202	0.244
Ammonia (N-NH ₃)	mg/L	20-29 ³	131-191 ³	-	0.0066	0.0113
Nitrite (N-NO ₂)	mg/L	-	-	-	0.0296	0.0204
Nitrate (N-NO ₃)	mg/L	3.7	339	-	0.452	0.223
Total Metals						
Aluminum, total (T-Al)	mg/L	-	-	-	0.812	0.738
Antimony, total (T-Sb)	mg/L	-	0.27 ⁴	-	0.00126	0.00139
Arsenic, total (T-As)	mg/L	0.0125	0.0125	-	0.00203	0.00208
Barium, total (T-Ba)	mg/L	-	-	-	0.0142	0.0105
Beryllium, total (T-Be)	mg/L	0.1	-	-	0.00002	<0.00002
Boron, total (T-B)	mg/L	1.2	-	-	0.09	0.085
Cadmium, total (T-Cd)	mg/L	0.00012	-	-	<0.000065	<0.000045
Chromium, total (T-Cr)	mg/L	-	-	-	0.00135	0.00137
Cobalt, total (T-Co)	mg/L	-	-	-	0.00034	0.00019
Copper, total (T-Cu)	mg/L	- ²	- ²	0.0043	0.00375	0.00438
Iron, total (T-Fe)	mg/L	-	-	-	0.687	0.334
Lead, total (T-Pb)	mg/L	- ²	- ²	0.0035	0.00156	0.000816
Manganese, total (T-Mn)	mg/L	-	-	-	0.0526	0.0246
Mercury, total (T-Hg)	mg/L	0.000016 ⁵	-	-	0.0000187	0.0000198
Molybdenum, total (T-Mo)	mg/L	-	-	-	0.0921	0.105
Nickel, total (T-Ni)	mg/L	0.0083	-	-	0.00057	0.00052
Selenium, total (T-Se)	mg/L	0.002	-	-	0.000342	0.000392
Silver, total (T-Ag)	mg/L	0.0005	0.0037	-	<0.00001	<0.00001
Thallium, total (T-Tl)	mg/L	-	-	-	0.000024	0.000021
Uranium, total (T-U)	mg/L	-	-	-	0.018	0.0164
Vanadium, total (T-V)	mg/L	- ²	-	0.0081	0.00356	0.00343
Zinc, total (T-Zn)	mg/L	- ²	- ²	0.0133	0.0061	0.0141
Hexavalent Chromium, total	mg/L	0.0015	-	-	<0.0005	0.0009
Dissolved Metals						
Cadmium, dissolved (D-Cd)	mg/L	-	-	-	<0.000045	<0.00003
Copper, dissolved (D-Cu)	mg/L	-	-	-	0.00184	0.00256
Iron, dissolved (D-Fe)	mg/L	-	-	-	0.011	0.017
Lead, dissolved (D-Pb)	mg/L	-	-	-	<0.00005	<0.00005
Manganese, dissolved (D-Mn)	mg/L	-	-	-	1.51	1.05
Nickel, dissolved (D-Ni)	mg/L	-	-	-	<0.0005	<0.0005
Strontium, dissolved (D-Sr)	mg/L	-	-	-	0.171	0.141
Vanadium, dissolved (D-V)	mg/L	-	-	-	0.00224	0.00274
Zinc, dissolved (D-Zn)	mg/L	-	-	-	0.0017	0.018
Polycyclic Aromatic Hydrocarbons (PAHs)						
Acenaphthene	mg/L	0.006	-	-	<0.00001	<0.00001
Acridine	mg/L	-	-	-	<0.00001	<0.00001
Anthracene	mg/L	-	-	-	<0.00001	<0.00001
Benz(a)anthracene	mg/L	-	-	-	<0.00001	<0.00001
Benzo(a)pyrene	mg/L	0.00001	-	-	<0.000005	<0.000005
Chrysene	mg/L	0.0001	-	-	<0.00001	<0.00001
Fluoranthene	mg/L	-	-	-	<0.00001	<0.00001
Fluorene	mg/L	0.012	-	-	<0.00001	<0.00001
1-methylnaphthalene	mg/L	0.001	-	-	<0.00001	<0.00001
2-methylnaphthalene	mg/L	0.001	-	-	<0.00001	<0.00001
Naphthalene	mg/L	0.001	-	-	<0.00005	<0.00005
Phenanthrene	mg/L	-	-	-	<0.00002	<0.00002
Pyrene	mg/L	-	-	-	<0.00001	<0.00001
Quinoline	mg/L	-	-	-	<0.00005	<0.00005
Volatile Organic Compounds (VOCs)						
Benzene	mg/L	0.11	-	-	<0.0005	<0.0005
Ethylbenzene	mg/L	0.25	-	-	<0.0005	<0.0005
Methyl-tert-butyl-ether	mg/L	5	0.44	-	<0.0005	<0.0005
Styrene	mg/L	-	-	-	<0.0005	<0.0005
Toluene	mg/L	0.215	-	-	<0.0004	<0.0004
Total Xylenes	mg/L	-	-	-	<0.0005	<0.0005
Chlorobenzene	mg/L	0.025	-	-	<0.0005	<0.0005
1,2-Dichlorobenzene	mg/L	0.042	-	-	<0.0005	<0.0005

Notes: Results **underlined in bold italics** exceed the applicable long-term water quality guideline for the protection of marine water aquatic life. Shaded results exceed the applicable short-term water quality guideline for the protection of marine water aquatic life. Results in orange text exceeded the PE-111578 East Sedimentation Pond Discharge Limit. The East Catchment discharged on April 13 and 16 during the monitoring period (April 13 – April 19). 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 SP-E-OUT	Station SP-E-OUT	Station WWTP-E-OUT
					Effluent	Effluent	Effluent
		SP-E-OUT	SP-E-OUT-DUP		WWTP-E-OUT		
		VA25A8533-002	VA25A8533-003		VA25A8764-002		
		Long Term	Short Term		2025-04-16 10:15	2025-04-16 10:15	2025-04-19 09:00
General Parameters							
pH - Field	pH units	- ²	-	5.5 - 9.0	7.3	7.3	6.3
Conductivity - Field	µS/cm	-	-	-	804	804	818
Temperature - Field	°C	-	-	-	14.3	14.3	15.8
Salinity - Field	ppt	-	-	-	0.5	0.5	0.49
Turbidity - Field	NTU	-	-	-	1.75	1.75	1.23
TSS	mg/L	-	-	25 or 75 ⁶	<3	<3	<3
Dissolved Oxygen - Field	mg/L	≥8	-	-	11.81	11.81	8.46
Anions and Nutrients							
Sulphate	mg/L	-	-	-	330	328	239
Chloride	mg/L	-	-	-	6.57	6.51	8.48
Fluoride	mg/L	-	1.5	-	0.198	0.192	0.154
Ammonia (N-NH ₃)	mg/L	18-20 ³	121-131 ³	-	0.0051	0.0166	0.0224
Nitrite (N-NO ₂)	mg/L	-	-	-	0.0456	0.0428	0.0101
Nitrate (N-NO ₃)	mg/L	3.7	339	-	0.508	0.506	0.17
Total Metals							
Aluminum, total (T-Al)	mg/L	-	-	-	0.0638	0.0686	0.119
Antimony, total (T-Sb)	mg/L	-	0.27 ⁴	-	0.00126	0.00125	0.00125
Arsenic, total (T-As)	mg/L	0.0125	0.0125	-	0.00094	0.00098	0.00139
Barium, total (T-Ba)	mg/L	-	-	-	0.00491	0.00512	0.00189
Beryllium, total (T-Be)	mg/L	0.1	-	-	<0.00002	<0.00002	<0.00002
Boron, total (T-B)	mg/L	1.2	-	-	0.045	0.045	0.056
Cadmium, total (T-Cd)	mg/L	0.00012	-	-	<0.000025	<0.00003	<0.00002
Chromium, total (T-Cr)	mg/L	-	-	-	<0.0005	<0.0005	0.00073
Cobalt, total (T-Co)	mg/L	-	-	-	0.00012	0.00012	<0.0001
Copper, total (T-Cu)	mg/L	- ²	- ²	0.0043	0.0015	0.00158	0.00299
Iron, total (T-Fe)	mg/L	-	-	-	0.068	0.07	0.043
Lead, total (T-Pb)	mg/L	- ²	- ²	0.0035	0.0002	0.000194	0.000188
Manganese, total (T-Mn)	mg/L	-	-	-	0.0386	0.0394	0.00364
Mercury, total (T-Hg)	mg/L	0.000016 ⁵	-	-	0.0000058	0.00000597	0.00000784
Molybdenum, total (T-Mo)	mg/L	-	-	-	0.0996	0.103	0.0958
Nickel, total (T-Ni)	mg/L	0.0083	-	-	<0.0005	<0.0005	<0.0005
Selenium, total (T-Se)	mg/L	0.002	-	-	0.00036	0.000369	0.000366
Silver, total (T-Ag)	mg/L	0.0005	0.0037	-	<0.00001	<0.00001	<0.00001
Thallium, total (T-Tl)	mg/L	-	-	-	0.000033	0.000034	0.000014
Uranium, total (T-U)	mg/L	-	-	-	0.0085	0.00844	0.0111
Vanadium, total (T-V)	mg/L	- ²	-	0.0081	0.00186	0.00185	0.00257
Zinc, total (T-Zn)	mg/L	- ²	- ²	0.0133	<0.003	<0.003	<0.003
Hexavalent Chromium, total	mg/L	0.0015	-	-	<0.0005	<0.0005	0.00057
Dissolved Metals							
Cadmium, dissolved (D-Cd)	mg/L	-	-	-	<0.00003	<0.00003	<0.000025
Copper, dissolved (D-Cu)	mg/L	-	-	-	0.00103	0.00102	0.00281
Iron, dissolved (D-Fe)	mg/L	-	-	-	0.012	0.012	0.028
Lead, dissolved (D-Pb)	mg/L	-	-	-	0.000063	0.000061	0.000262
Manganese, dissolved (D-Mn)	mg/L	-	-	-	1.09	1.07	0.224
Nickel, dissolved (D-Ni)	mg/L	-	-	-	<0.0005	<0.0005	<0.0005
Strontium, dissolved (D-Sr)	mg/L	-	-	-	0.179	0.172	0.0639
Vanadium, dissolved (D-V)	mg/L	-	-	-	0.00169	0.00166	0.00252
Zinc, dissolved (D-Zn)	mg/L	-	-	-	0.001	0.0011	0.0044
Polycyclic Aromatic Hydrocarbons (PAHs)							
Acenaphthene	mg/L	0.006	-	-	<0.00001	<0.00001	<0.00001
Acridine	mg/L	-	-	-	<0.00001	<0.00001	<0.00001
Anthracene	mg/L	-	-	-	<0.00001	<0.00001	<0.00001
Benz(a)anthracene	mg/L	-	-	-	<0.00001	<0.00001	<0.00001
Benzo(a)pyrene	mg/L	0.00001	-	-	<0.000005	<0.000005	<0.000005
Chrysene	mg/L	0.0001	-	-	<0.00001	<0.00001	<0.00001
Fluoranthene	mg/L	-	-	-	<0.00001	<0.00001	<0.00001
Fluorene	mg/L	0.012	-	-	<0.00001	<0.00001	<0.00001
1-methylnaphthalene	mg/L	0.001	-	-	<0.00001	<0.00001	<0.00001
2-methylnaphthalene	mg/L	0.001	-	-	<0.00001	<0.00001	<0.00001
Naphthalene	mg/L	0.001	-	-	<0.00005	<0.00005	<0.00005
Phenanthrene	mg/L	-	-	-	<0.00002	<0.00002	<0.00002
Pyrene	mg/L	-	-	-	<0.00001	<0.00001	<0.00001
Quinoline	mg/L	-	-	-	<0.00005	<0.00005	<0.00005
Volatile Organic Compounds (VOCs)							
Benzene	mg/L	0.11	-	-	<0.0005	<0.0005	<0.0005
Ethylbenzene	mg/L	0.25	-	-	<0.0005	<0.0005	<0.0005
Methyl-tert-butyl-ether	mg/L	5	0.44	-	<0.0005	<0.0005	<0.0005
Styrene	mg/L	-	-	-	<0.0005	<0.0005	<0.0005
Toluene	mg/L	0.215	-	-	<0.0004	<0.0004	<0.0004
Total Xylenes	mg/L	-	-	-	<0.0005	<0.0005	<0.0005
Chlorobenzene	mg/L	0.025	-	-	<0.0005	<0.0005	<0.0005
1,2-Dichlorobenzene	mg/L	0.042	-	-	<0.0005	<0.0005	0.0005

Notes: Results **underlined in bold italics** exceed the applicable long-term water quality guideline for the protection of marine water aquatic life. Shaded results exceed the applicable short-term water quality guideline for the protection of marine water aquatic life. Results in orange text exceeded the PE-111578 East Sedimentation Pond Discharge Limit. The East Catchment discharged on April 13 and 16 during the monitoring period (April 13 – April 19). 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 Field Measurements Collected During the Monitoring Period (April 13 – 19).

Parameter			Temp.	Dissolved Oxygen (DO)	Salinity	Turbidity	Estimated TSS ³	pH	Conductivity	Visibility of Sheen
Unit			°C	mg/L	ppt	NTU	mg/L	s.u.	µS/cm	
PE-111578 Discharge Limit			-	-	-	-	25 or 75 ⁶	5.5 - 9.0	-	-
Lowest Applicable Guideline ¹			-	≥8	-	-	- ²	- ²	-	-
Station ID	Water Type	Date								
Influent ⁴										
SP-E-IN	Influent	2025-04-13 11:35	12	11.87	0.49	3.67	5.7	7	737	No
SP-E-IN	Influent	2025-04-14 13:21	13.8	9.77	0.29	18.6	16.9	7.1	460	No
SP-E-IN	Influent	2025-04-15 13:08	14.5	10.84	0.37	18.87	17.1	6.9	595	No
SP-E-IN	Influent	2025-04-16 11:18	14	11.16	0.44	26.46	22.7	7.2	709	No
SP-E-IN	Influent	2025-04-17 15:01	19.4	12.76	0.38	6.91	8.2	8	699	No
SP-E-IN	Influent	2025-04-13 11:35	12	11.87	0.49	3.67	5.7	7	737	No
SP-E-IN	Influent	2025-04-14 13:21	13.8	9.77	0.29	18.6	16.9	7.1	460	No
WWTP-E-IN	Influent	2025-04-13 12:12	11.6	11.58	0.47	5.57	7.2	7	727	No
WWTP-E-IN	Influent	2025-04-19 08:57	14.3	10.8	0.49	8.03	9.0	7.2	784	No
E500GPM-IN	Influent	2025-04-13 11:46	12	11.53	0.48	6.27	7.7	6.9	729	No
E500GPM-IN	Influent	2025-04-16 09:54	14.1	11.32	0.49	17.65	16.2	7.4	784	No
Effluent ⁵										
SP-E-OUT	Effluent	2025-04-13 12:05	12.7	11.84	0.48	1.7	4.3	7.2	735	No
SP-E-OUT	Effluent	2025-04-16 10:13	14.3	11.81	0.5	1.75	4.3	7.3	804	No
WWTP-E-OUT	Effluent	2025-04-13 12:16	12.2	9.13	0.55	1.59	4.2	6	832	No
WWTP-E-OUT	Effluent	2025-04-19 08:53	15.8	8.46	0.49	1.23	3.9	6.3	818	No
E500GPM-OUT	Effluent	2025-04-13 11:44	12.1	12.43	0.48	1.5	4.1	7.3	722	No
E500GPM-OUT	Effluent	2025-04-16 09:53	13.3	12.03	0.5	1.85	4.4	7.3	777	No

Notes:
Results **underlined in bold italics** exceed the applicable long-term water quality guideline for the protection of marine water aquatic life.
Shaded results exceed the applicable short-term water quality guideline for the protection of marine water aquatic life.
Results in orange text exceeded the PE-111578 East Sedimentation Pond Discharge Limit.
¹ The lowest applicable guidelines from approved or working BC WQGs, Canadian (CCME) WQGs and Federal WQGs.
² The WQG was not evaluated for parameters with discharge limits.
³ TSS concentration is estimated from field turbidity measurements using a site-specific relationship TSS = 0.7458 * [turbidity as NTU] + 3.
⁴ Daily field measurements for station SP-E-IN were collected from cell 1 of the East Sedimentation Pond. Field measurements were not collected at WWTP-E-IN from April 14 through 18 since the East WWTP was not operational at the time of monitoring.
⁵ Daily field measurements were not collected at WWTP-E-OUT from April 14 through 18 since the East WWTP was not operational at the time of monitoring.
⁶ The PE-111578 discharge limit for TSS is 25 mg/L under dry conditions and 75 mg/L for Wet Conditions.

Table B-4: East Catchment Daily Discharge Volumes for the Monitoring Period (April 13 – 19).

	East Sedimentation Pond Effluent	East TSS Settling System (E500GPM) Clarified Effluent (Station E500GPM-OUT)	East WWTP Treated Effluent (Station WWTP-E-OUT)	Discharge to Howe Sound (Station SP-E-OUT)
Unit	m ³	m ³	m ³	m ³
PE-111578 Discharge Limit	- ¹	- ¹	1100	- ¹
Date				
2025-04-13	0	552 ²	436 ³	127
2025-04-14	0	0	0	0
2025-04-15	0	0	0	0
2025-04-16	0	629 ²	0	393
2025-04-17	0	0	0	0
2025-04-18	0	0	800	0
2025-04-19	0	0	791	0

Notes:

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

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

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

¹ The annual average authorized discharge rate from the East Sedimentation Pond is 650 m³/day. As noted in PE-111578 Condition 2.1.4, the actual discharge rate may deviate from the annual average rate due to annual variations in precipitation amounts within the catchment area. Therefore, the annual average authorized discharge rate is not evaluated as a discharge limit.

² E500GPM clarified effluent is discharged to Howe Sound or recirculated to the East Sedimentation Pond based on operational considerations. Therefore, the E500GPM clarified effluent volume is generally higher than the volume discharged to Howe Sound. The E500GPM was operational on April 13 and April 16 during the monitoring period (April 13-19).

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
					VA25A8533-005
		Long Term	Short Term		2025-04-16 13:15
General Parameters					
pH - Field	pH units	- ²	-	5.5 - 9.0	7.0
Conductivity - Field	µS/cm	-	-	-	123
Temperature - Field	°C	-	-	-	14.9
Salinity - Field	ppt	-	-	-	0.07
Turbidity - Field	NTU	-	-	-	5.53 ⁷
TSS	mg/L	-	-	25 or 75 ⁶	3.9
Dissolved Oxygen - Field	mg/L	≥8	-	-	12.16
Anions and Nutrients					
Sulphate	mg/L	-	-	-	24.6
Chloride	mg/L	-	-	-	7.71
Fluoride	mg/L	-	1.5	-	0.063
Ammonia (N-NH ₃)	mg/L	0.53 ³	3.5 ³	-	0.0071
Nitrite (N-NO ₂)	mg/L	-	-	-	0.0306
Nitrate (N-NO ₃)	mg/L	3.7	339	-	1.21
Total Metals					
Aluminum, total (T-Al)	mg/L	-	-	-	0.455
Antimony, total (T-Sb)	mg/L	-	0.27 ⁴	-	0.00099
Arsenic, total (T-As)	mg/L	0.0125	0.0125	-	0.00163
Barium, total (T-Ba)	mg/L	-	-	-	0.00521
Beryllium, total (T-Be)	mg/L	0.1	-	-	<0.00002
Boron, total (T-B)	mg/L	1.2	-	-	0.014
Cadmium, total (T-Cd)	mg/L	0.00012	-	-	<0.00002
Chromium, total (T-Cr)	mg/L	-	-	-	0.00106
Cobalt, total (T-Co)	mg/L	-	-	-	0.00014
Copper, total (T-Cu)	mg/L	- ²	- ²	0.0043	0.00205
Iron, total (T-Fe)	mg/L	-	-	-	0.22
Lead, total (T-Pb)	mg/L	- ²	- ²	0.0035	0.000618
Manganese, total (T-Mn)	mg/L	-	-	-	0.0153
Mercury, total (T-Hg)	mg/L	0.000016 ⁵	-	-	0.00000222
Molybdenum, total (T-Mo)	mg/L	-	-	-	0.0307
Nickel, total (T-Ni)	mg/L	0.0083	-	-	<0.0005
Selenium, total (T-Se)	mg/L	0.002	-	-	0.000214
Silver, total (T-Ag)	mg/L	0.0005	0.0037	-	<0.00001
Thallium, total (T-Tl)	mg/L	-	-	-	0.000014
Uranium, total (T-U)	mg/L	-	-	-	0.00572
Vanadium, total (T-V)	mg/L	- ²	-	0.0081	0.00235
Zinc, total (T-Zn)	mg/L	- ²	- ²	0.0133	<0.003
Hexavalent Chromium, total	mg/L	0.0015	-	-	0.00084
Dissolved Metals					
Cadmium, dissolved (D-Cd)	mg/L	-	-	-	<0.000015
Copper, dissolved (D-Cu)	mg/L	-	-	-	0.00138
Iron, dissolved (D-Fe)	mg/L	-	-	-	0.018
Lead, dissolved (D-Pb)	mg/L	-	-	-	0.00009
Manganese, dissolved (D-Mn)	mg/L	-	-	-	0.726
Nickel, dissolved (D-Ni)	mg/L	-	-	-	<0.0005
Strontium, dissolved (D-Sr)	mg/L	-	-	-	0.0623
Vanadium, dissolved (D-V)	mg/L	-	-	-	0.00196
Zinc, dissolved (D-Zn)	mg/L	-	-	-	<0.001
Polycyclic Aromatic Hydrocarbons (PAHs)					
Acenaphthene	mg/L	0.006	-	-	<0.00001
Acridine	mg/L	-	-	-	<0.00001
Anthracene	mg/L	-	-	-	<0.00001
Benz(a)anthracene	mg/L	-	-	-	<0.00001
Benzo(a)pyrene	mg/L	0.00001	-	-	<0.000005
Chrysene	mg/L	0.0001	-	-	<0.00001
Fluoranthene	mg/L	-	-	-	<0.00001
Fluorene	mg/L	0.012	-	-	<0.00001
1-methylnaphthalene	mg/L	0.001	-	-	<0.00001
2-methylnaphthalene	mg/L	0.001	-	-	<0.00001
Naphthalene	mg/L	0.001	-	-	<0.00005
Phenanthrene	mg/L	-	-	-	<0.00002
Pyrene	mg/L	-	-	-	<0.00001
Quinoline	mg/L	-	-	-	<0.00005
Volatile Organic Compounds (VOCs)					
Benzene	mg/L	0.11	-	-	<0.0005
Ethylbenzene	mg/L	0.25	-	-	<0.0005
Methyl-tert-butyl-ether	mg/L	5	0.44	-	<0.0005
Styrene	mg/L	-	-	-	<0.0005
Toluene	mg/L	0.215	-	-	<0.0004
Total Xylenes	mg/L	-	-	-	<0.0005
Chlorobenzene	mg/L	0.025	-	-	<0.0005
1,2-Dichlorobenzene	mg/L	0.042	-	-	<0.0005

Notes: Results **underlined in bold italics** exceed the applicable long-term water quality guideline for the protection of marine water aquatic life. Shaded results exceed the applicable short-term water quality guideline for the protection of marine water aquatic life. Results in orange text exceeded the PE-111578 West Sedimentation Pond Discharge Limit. The West Catchment discharged on April 16 during the monitoring period (April 13 – April 19).
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 Field turbidity (61.14) does not align with lab turbidity (5.53) and TSS (3.9 mg/L). Field turbidity is suspected to be erroneous based on low levels of lab turbidity, TSS, and total metals. Lab turbidity is reported instead.

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
					VA25A8533-006
		Long Term	Short Term		2025-04-16 13:30
General Parameters					
pH - Field	pH units	- ²	-	5.5 - 9.0	6.8
Conductivity - Field	µS/cm	-	-	-	124
Temperature - Field	°C	-	-	-	15.7
Salinity - Field	ppt	-	-	-	0.07
Turbidity - Field	NTU	-	-	-	2.6
TSS	mg/L	-	-	25 or 75 ⁶	<3
Dissolved Oxygen - Field	mg/L	≥8	-	-	11.84
Anions and Nutrients					
Sulphate	mg/L	-	-	-	24.6
Chloride	mg/L	-	-	-	7.68
Fluoride	mg/L	-	1.5	-	0.063
Ammonia (N-NH ₃)	mg/L	2 ³	13 ³	-	0.0066
Nitrite (N-NO ₂)	mg/L	-	-	-	0.0266
Nitrate (N-NO ₃)	mg/L	3.7	339	-	1.24
Total Metals					
Aluminum, total (T-Al)	mg/L	-	-	-	0.257
Antimony, total (T-Sb)	mg/L	-	0.27 ⁴	-	0.00099
Arsenic, total (T-As)	mg/L	0.0125	0.0125	-	0.00152
Barium, total (T-Ba)	mg/L	-	-	-	0.00231
Beryllium, total (T-Be)	mg/L	0.1	-	-	<0.00002
Boron, total (T-B)	mg/L	1.2	-	-	0.012
Cadmium, total (T-Cd)	mg/L	0.00012	-	-	<0.00002
Chromium, total (T-Cr)	mg/L	-	-	-	0.00135
Cobalt, total (T-Co)	mg/L	-	-	-	<0.0001
Copper, total (T-Cu)	mg/L	- ²	- ²	0.0043	0.00179
Iron, total (T-Fe)	mg/L	-	-	-	0.068
Lead, total (T-Pb)	mg/L	- ²	- ²	0.0035	0.000303
Manganese, total (T-Mn)	mg/L	-	-	-	0.011
Mercury, total (T-Hg)	mg/L	0.000016 ⁵	-	-	0.00000138
Molybdenum, total (T-Mo)	mg/L	-	-	-	0.031
Nickel, total (T-Ni)	mg/L	0.0083	-	-	<0.0005
Selenium, total (T-Se)	mg/L	0.002	-	-	0.000203
Silver, total (T-Ag)	mg/L	0.0005	0.0037	-	<0.00001
Thallium, total (T-Tl)	mg/L	-	-	-	0.000015
Uranium, total (T-U)	mg/L	-	-	-	0.00568
Vanadium, total (T-V)	mg/L	- ²	-	0.0081	0.00218
Zinc, total (T-Zn)	mg/L	- ²	- ²	0.0133	0.0037
Hexavalent Chromium, total	mg/L	0.0015	-	-	0.00099
Dissolved Metals					
Cadmium, dissolved (D-Cd)	mg/L	-	-	-	<0.00001
Copper, dissolved (D-Cu)	mg/L	-	-	-	0.0013
Iron, dissolved (D-Fe)	mg/L	-	-	-	0.018
Lead, dissolved (D-Pb)	mg/L	-	-	-	0.00011
Manganese, dissolved (D-Mn)	mg/L	-	-	-	0.713
Nickel, dissolved (D-Ni)	mg/L	-	-	-	<0.0005
Strontium, dissolved (D-Sr)	mg/L	-	-	-	0.0597
Vanadium, dissolved (D-V)	mg/L	-	-	-	0.00197
Zinc, dissolved (D-Zn)	mg/L	-	-	-	0.0022
Polycyclic Aromatic Hydrocarbons (PAHs)					
Acenaphthene	mg/L	0.006	-	-	<0.00001
Acridine	mg/L	-	-	-	<0.00001
Anthracene	mg/L	-	-	-	<0.00001
Benz(a)anthracene	mg/L	-	-	-	<0.00001
Benzo(a)pyrene	mg/L	0.00001	-	-	<0.000005
Chrysene	mg/L	0.0001	-	-	<0.00001
Fluoranthene	mg/L	-	-	-	<0.00001
Fluorene	mg/L	0.012	-	-	<0.00001
1-methylnaphthalene	mg/L	0.001	-	-	<0.00001
2-methylnaphthalene	mg/L	0.001	-	-	<0.00001
Naphthalene	mg/L	0.001	-	-	<0.00005
Phenanthrene	mg/L	-	-	-	<0.00002
Pyrene	mg/L	-	-	-	<0.00001
Quinoline	mg/L	-	-	-	<0.00005
Volatile Organic Compounds (VOCs)					
Benzene	mg/L	0.11	-	-	<0.0005
Ethylbenzene	mg/L	0.25	-	-	<0.0005
Methyl-tert-butyl-ether	mg/L	5	0.44	-	<0.0005
Styrene	mg/L	-	-	-	<0.0005
Toluene	mg/L	0.215	-	-	<0.0004
Total Xylenes	mg/L	-	-	-	<0.0005
Chlorobenzene	mg/L	0.025	-	-	<0.0005
1,2-Dichlorobenzene	mg/L	0.042	-	-	<0.0005

Notes: Results **underlined in bold italics** exceed the applicable long-term water quality guideline for the protection of marine water aquatic life. Shaded results exceed the applicable short-term water quality guideline for the protection of marine water aquatic life. Results in orange text exceeded the PE-111578 West Sedimentation Pond Discharge Limit. The West Catchment discharged on April 16 during the monitoring period (April 13 – April 19).
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-3: West Catchment Field Measurements Collected During the Monitoring Period (April 13 – 19).

Parameter			Temperature	Dissolved Oxygen (DO)	Salinity	Turbidity	Estimated TSS ³	pH	Conductivity	Visibility of Sheen
Unit			°C	mg/L	ppt	NTU	mg/L	s.u.	µS/cm	
PE-111578 Discharge Limit			-	-	-	-	25 or 75 ⁵	5.5 - 9.0	-	-
Lowest Applicable Guideline ¹			-	≥8	-	-	- ²	- ²	-	-
Station ID	Water Type	Date								
Influent ⁴										
SP-W-IN	Influent	2025-04-13 12:27	10.2	11.77	0.08	21.57	19.1	7.9	126	No
SP-W-IN	Influent	2025-04-14 13:36	12.5	12.02	0.08	16.31	15.2	8.4	131	No
SP-W-IN	Influent	2025-04-15 13:41	13.5	11.75	0.07	13.62	13.2	8.6	113	No
SP-W-IN	Influent	2025-04-16 13:18	14.9	12.16	0.07	5.53 ⁶	7.1	7	123	No
SP-W-IN	Influent	2025-04-17 15:11	15.5	12.27	0.07	15.9	14.9	8	118	No
SP-W-IN	Influent	2025-04-18 09:24	11.8	11.43	0.08	12.23	12.1	7.8	123	No
SP-W-IN	Influent	2025-04-19 09:28	12.7	11.38	0.08	19.47	17.5	8.1	129	No
W500GPM-IN	Influent	2025-04-16 13:01	14.9	12.89	0.07	7.69	8.7	8.8	121	No
Effluent										
SP-W-OUT	Effluent	2025-04-16 13:25	15.7	11.84	0.07	2.6	4.9	6.8	124	No
W500GPM-OUT	Effluent	2025-04-16 12:56	15.2	12.42	0.07	2.34	4.7	6.8	123	No

Notes: Results **underlined in bold italics** exceed the applicable long-term water quality guideline for the protection of marine water aquatic life. Shaded results exceed the applicable short-term water quality guideline for the protection of marine water aquatic life. Results in orange text exceeded the PE-111578 West Sedimentation Pond Discharge Limit.

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

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

³ TSS concentration is estimated from field turbidity measurements using a site-specific relationship TSS = 0.7458 * [turbidity as NTU] + 3.

⁴ Daily field measurements for station SP-W-IN were collected from cell 1 of the West Sedimentation Pond.

⁵ The PE-111578 discharge limit for TSS is 25 mg/L under dry conditions and 75 mg/L for Wet Conditions.

⁶ Field turbidity (61.14) measured at SP-W-IN on April 16 does not align with lab turbidity (5.53) and TSS (3.9 mg/L). Field turbidity is suspected to be erroneous based on low levels of lab turbidity, TSS, and total metals. Lab turbidity is reported instead.

Table C-4: West Catchment Daily Discharge Volumes for the Monitoring Period (April 13 – 19).

	West Sedimentation Pond Effluent	West TSS Settling System (W500GPM) Clarified Effluent (Station W500GPM-OUT)	West TSS Settling System (ESC) Clarified Effluent (Station ESC-W-OUT)	West WWTP Treated Effluent ¹ (Station WWTP-W-OUT)	Discharge to Howe Sound (Station SP-W-OUT)
Unit	m ³	m ³	m ³	m ³	m ³
PE-111578 Discharge Limit	- ²	- ²	- ²	120	- ²
Date					
2025-04-13	0	0	0	0	0
2025-04-14	0	0	0	0	0
2025-04-15	0	0	0	0	0
2025-04-16	0	1,643 ³	0	0	1,167
2025-04-17	0	0	0	0	0
2025-04-18	0	0	0	0	0
2025-04-19	0	0	0	0	0

Notes: Results **underlined in bold italics** exceed the applicable long-term water quality guideline for the protection of marine water aquatic life. Shaded results exceed the applicable short-term water quality guideline for the protection of marine water aquatic life. Results in orange text exceeded the PE-111578 West Sedimentation Pond Discharge Limit.

¹ The West WWTP is not being operated, therefore discharges are not expected from this facility.

² The annual average authorized discharge rate from the West Sedimentation Pond is 310 m³/day. As noted in PE-111578 Condition 2.1.4, the actual discharge rate may deviate from the annual average rate due to annual variations in precipitation amounts within the catchment area. Therefore, the annual average authorized discharge rate is not evaluated as a discharge limit.

³ W500GPM clarified effluent is discharged to Howe Sound or recirculated to the West Sedimentation Pond based on operational considerations. Therefore, the W500GPM clarified effluent volume may be higher than the volume discharged to Howe Sound at station SP-W-OUT. The W500GPM was operational on April 16 during the monitoring period (April 13-19).