



## TECHNICAL MEMORANDUM

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**To:** Ian McAllister, Ashleigh Crompton, Mike Champion,  
Mark Zan and Ryan Schucroft (Woodfibre LNG) **Date:** 5 June 2026

**From:** Holly Pelletier and Cheng Kuang (Lorax) **Project #:** A825-1

**Subject:** PE-111578 Weekly Discharge and Compliance Report #116 for May 24 – 30

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

This technical memorandum (Report #116) was prepared by Lorax and summarizes WDA monitoring conducted for the period of May 24 – 30. 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 #116 has been prepared to meet the requirements specified in Condition 4.2 of PE-111578:

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

Site layout and water management figures and site images are included in Appendix A. Monitoring results are tabulated in Appendix B through Appendix F for contact water, treated water and receiving environment samples.

## 1. Current Conditions

### 1.1 Water Management Infrastructure

The Construction Phase of the Woodfibre LNG Export Facility commenced in October 2023. Shoring works along the foreshore areas were initiated in December 2023, and construction of water management infrastructure commenced in early 2024. Land-based construction occurs within two water management areas east and west of Mill Creek, referred to as the east and west catchments, respectively. Non-contact water is intercepted and diverted around the construction areas to Howe Sound and Mill Creek. Stormwater runoff collected within the east and west catchment areas (7.12 and 5.92 ha, respectively) is managed as site contact water and is conveyed to the East Wastewater Treatment Plant (WWTP) for treatment, or to the East and West Sedimentation Ponds for settling of suspended particulate prior to discharge. Intermittent discharge to Howe Sound from the East and West Sedimentation Ponds commenced April and October 2024, respectively.

Non-contact water from the slopes above and outside the Woodfibre LNG construction area is intercepted by diversion ditches and conveyed to Howe Sound or Mill Creek. Diversion ditches for the west catchment convey water to Mill Creek at station OUT-06, or to Howe Sound at station OUT-02 (Appendix A, Figure 1). During heavy precipitation, non-contact water is also conveyed to Howe Sound via station OUT-01. East of Mill Creek, non-contact water is intercepted and diverted around the east catchment along pre-existing road ditches that flow to East Creek or Mill Creek and through Outfall 13 (OUT-13). The diversion ditch connected to Outfall 11 (OUT-11) is not yet constructed; therefore, Outfall 11 is not in use. The lower reach of East Creek discharges to Howe Sound through Outfall 12 (OUT-12).

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

The East and West WWTPs were commissioned to treat contaminated contact water in April and August 2024, respectively. The installed treatment capacities are 1,080 m<sup>3</sup>/day (East WWTP) and 120 m<sup>3</sup>/day (West WWTP). Lower than expected volumes of contaminated contact water have been encountered during construction; therefore, operation of the West WWTP has been suspended since September 25, 2024, and all contaminated contact waters are directed to the East WWTP for treatment. Treated effluent is generally directed to the East Sedimentation Pond. Occasionally the East WWTP effluent is discharged to Howe Sound at authorized discharge location SP-E-OUT.

Discharge from the East and West Sedimentation Ponds is controlled using pumps. Sedimentation pond effluent is pumped to the 2700GPM TSS settling system to remove TSS prior to discharge. Each sedimentation pond has an associated authorized discharge location (stations SP-E-OUT and SP-W-OUT) with an initial dilution zone (IDZ) where discharged water mixes with Howe Sound surface waters. The IDZ is defined in PE-111578 and extends in a 150 m radius from each point of discharge into Howe Sound. Since June 2025, surplus contact water in the East Sedimentation Pond is directed to the West Sedimentation Pond for storage or discharge, and discharge of clarified non-contaminated contact water to Howe Sound generally only occurs from the West Sedimentation Pond.

The flocculant-based 2700GPM TSS settling system has an installed capacity to clarify 14,700 m<sup>3</sup>/day of contact water and consists of six parallel treatment trains (Trains 1 to 6), each with an installed capacity of 2,450 m<sup>3</sup>/day. A staged commissioning of the 2700GPM system began June 2025 and was completed November 2025. Only one train is operated when contact water flows are low. Additional trains are activated as needed to match the influent volumes. Some of the TSS-clarified water may be recirculated back to the ponds or re-used for construction purposes (*e.g.*, dust suppression).

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

## 1.2 Weather and Water Management

Variable weather conditions were observed during the May 24 – 30 monitoring period, with precipitation recorded on May 24 (0.2 mm), May 25 (11.4 mm) and May 26 (2.2 mm). The total precipitation amount during the monitoring period was 13.8 mm. The daily weather conditions are summarized in Table 1.

**Table 1:**  
**Summary of Certified Project Area (CPA) Daily Weather Conditions.**

Date	Precipitation (mm)	Max. Temp (°C)	Min. Temp (°C)	Weather Description
2026-05-24	0.2	20.2	12.7	Mix of Sun and Cloud
2026-05-25	11.4	14.8	10.2	Rain
2026-05-26	2.2	17.7	9.2	Light Rain
2026-05-27	0	21.3	10.3	Sunny
2026-05-28	0	24.2	12.1	Sunny
2026-05-29	0	18.7	11.7	Sunny
2026-05-30	0	19.2	10.1	Sunny

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

From May 24 – 30, the East Sedimentation Pond received water from the 6468 Sump and recirculated effluent from the East WWTP (Appendix A, Figure 2). A total of 51 m<sup>3</sup> from the East Sedimentation Pond was transferred to the West Sedimentation Pond from May 24 – 30 (Appendix B, Table B-5).

Routine operation of the East WWTP continued during the monitoring period (May 24 – 30). Concrete contact water was periodically directed to the East WWTP for treatment, as well as water stored in the East Sedimentation Pond (Appendix A, Figure 2 and Figure 3). East WWTP treated effluent was discharged to the East Sedimentation Pond each day during the monitoring period (May 24 – 30) except on May 28 and 29. Daily water volumes processed by the East WWTP are provided in Appendix B (Table B-5).

From May 24 – 30, the West Sedimentation Pond received water from the 4100 Sump, the East Sedimentation Pond and recirculated effluent from the 2700GPM TSS settling system (Appendix A, Figure 3). West Sedimentation Pond effluent was clarified through the 2700GPM system each day during the monitoring period (May 24 – 30) and recirculated back to the pond. West Sedimentation Pond effluent was not discharged to Howe Sound during the monitoring period (May 24 – 30). A total of 827 m<sup>3</sup> of clarified effluent was reclaimed for construction use during the monitoring period (May 24 – 30). Daily clarified effluent volumes from the 2700GPM TSS settling system recirculated to the West Sedimentation Pond or reclaimed for construction use are provided in Appendix C (Table C-4).

## 2. Monitoring Summary

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

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

- Non-contact diversion ditch outlet monitoring stations (OUT-01, OUT-02 and OUT-06).
- Creek water monitoring stations for Woodfibre, Mill and East Creek (SW-01, SW-02, SW-03, SW-04, SW-07).
- Contact water monitoring locations (SP-E-IN, WWTP-E-IN, COMB-WWTP-E-IN, WWTP-E-OUT, SP-W-IN, 2700GPM-IN, and 2700GPM-OUT).
- Supplementary contact water stations at the outlet of each sampling train. These samples are identified as W2700T#-OUT (with # equal to the train number).
- Effluent compliance stations (SP-E-OUT and SP-W-OUT). As described in Section 1.1, when there is surplus water, West Sedimentation Pond clarified effluent from the individual 2700GPM trains is directed to SP-W-OUT for discharge. From late September to early December 2025, SP-W-OUT was sampled from the discharge manhole. From December 1 to 8, a pipe manifold was installed that combines effluent from the individual trains into a single discharge line and is configured with a sampling port. Since December 8, samples have been collected at the sampling port or at the outfall.
- Howe Sound reference and IDZ monitoring stations (WQR1, WQR2, IDZ-E1, IDZ-E2, IDZ-W1, and IDZ-W2).

The diversion ditch outlet at Outfall 11 (OUT-11) does not receive water and will not be monitored until it is operational.

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

A flocculant-based TSS settling system (2700GPM) is used at the West Sedimentation Pond as described in Section 1.1. Influent and effluent are monitored at stations 2700GPM-IN and 2700GPM-OUT, respectively. The 2700GPM-OUT station represents the combined discharge line from all six individual treatment trains when clarified effluent is directed to the West Sedimentation Pond and is equivalent to the SP-W-OUT station. At times when only one 2700GPM treatment train is operated, the 2700GPM-OUT sample may be collected at the outlet of that train. Monitoring of the individual 2700GPM settling system treatment trains is supplemental to the PE-111578 monitoring requirements and is conducted at the discretion of field staff.

Water quality was monitored at stations IDZ-E1, IDZ-E2, IDZ-W1, IDZ-W2, WQR1, WQR2, SP-E-IN, WWTP-E-IN, WWTP-E-OUT, SP-W-IN, 2700GPM-IN, and W2700T2-OUT during the monitoring period (May 24 – 30). Sampling dates and parameters tested are summarized in Table 2.

Overall, the PE-111578 monitoring requirements that were applicable during the monitoring period (May 24 – 30) were met. The initial high frequency monitoring requirements outlined in effluent permit PE-111578 for the sedimentation ponds, WWTP and IDZ stations have been met. On June 25, 2025, BCER approved the implementation of low-frequency (*i.e.*, bi-monthly and monthly) monitoring requirements specified in PE-111578 for all parameters, except for metals, hexavalent chromium, and methylmercury, which continue to be monitored weekly at sedimentation pond and WWTP stations.

Daily field parameters and a weekly analytical sample were not collected at the east and west catchment effluent compliance stations (SP-E-OUT and SP-W-OUT, respectively) as there was no discharge to Howe Sound from the East and West Sedimentation Ponds during the monitoring period (May 24 – 30). Daily field measurements for East WWTP influent and effluent stations (WWTP-E-IN and WWTP-E-OUT, respectively) were not collected on May 24 and May 26 – 29 as the East WWTP was not operational at the time of monitoring. Daily field parameters for the East Sedimentation Pond influent station (SP-E-IN) were not collected on May 28 and 29 as the pond level was lowered below the safe access point for pond cleaning. 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 (May 24 – 30).

**Table 2:  
Summary of PE-111578 Monitoring Samples Collected May 24 – 30.**

Sampling Date	Sample	Description	Parameters Tested	Monitoring Frequency
May 24, 2026	SP-E-IN	East Sedimentation Pond influent monitored at cell 1 of the pond	Field Parameters.	D
	SP-W-IN	West Sedimentation Pond influent monitored at cell 1 of the pond	Field Parameters.	D
	2700GPM-IN	2700GPM TSS settling system influent monitored at cell 4 of the pond	Field Parameters.	P
May 25, 2026	SP-E-IN	East Sedimentation Pond influent monitored at cell 1 of the pond	Field, Physical & General Parameters, Total, Dissolved and Speciated Metals, and Methylmercury.	D, M <sub>2</sub> , W
	WWTP-E-IN	East WWTP at the influent meter box	Field, Physical & General Parameters, Total, Dissolved and Speciated Metals, and Methylmercury.	D, M <sub>2</sub> , W
	WWTP-E-OUT	East WWTP at the effluent meter box	Field, Physical and General Parameters, Total and Dissolved Metals, Hexavalent Chromium, VOCs, PAHs, Methylmercury, Dioxins, Furans and Acute Toxicity.	D, M, M <sub>2</sub> , W, Q
	SP-W-IN	West Sedimentation Pond influent monitored at cell 1 of the pond	Field, Physical and General Parameters, Total and Dissolved Metals, Hexavalent Chromium, VOCs, PAHs, Methylmercury, Dioxins and Furans.	D, M, M <sub>2</sub> , W
	2700GPM-IN	2700GPM TSS settling system influent monitored at cell 4 of the pond	Field, Physical and General Parameters, Total and Dissolved Metals, Hexavalent Chromium, VOCs, PAHs, Methylmercury, Dioxins and Furans.	P
	W2700T2-OUT	2700GPM TSS settling system at the outlet of Train 2	Field, Physical and General Parameters, Total and Dissolved Metals, Hexavalent Chromium, VOCs, PAHs, Methylmercury, Dioxins, Furans and Acute Toxicity.	P, Q
May 26, 2026	SP-E-IN	East Sedimentation Pond influent monitored at cell 1 of the pond	Field Parameters.	D
	SP-W-IN	West Sedimentation Pond influent monitored at cell 1 of the pond	Field Parameters.	D
	2700GPM-IN	2700GPM TSS settling system influent monitored at cell 4 of the pond	Field Parameters.	P
	IDZ-E1-0.5	Howe Sound IDZ station E1; 0.5 m below surface	Field, Physical and General Parameters, Total and Dissolved Metals, Hexavalent Chromium, VOCs, PAHs, Methylmercury, Dioxins, Furans and Chronic Toxicity.	M, Q
	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	Field, Physical and General Parameters, Total and Dissolved Metals, Hexavalent Chromium, VOCs, PAHs, and Chronic Toxicity.	P, Q
	WQR1-SF	Reference site 1; 2 m above the seafloor		
	IDZ-W1-0.5	Howe Sound IDZ station W1; 0.5 m below surface		
IDZ-W2-0.5	Howe Sound IDZ station W2; 0.5 m below surface			
WQR2-0.5	Reference site 2; 0.5 m below surface			
May 27, 2026	SP-E-IN	East Sedimentation Pond influent monitored at cell 1 of the pond	Field Parameters.	D
	SP-W-IN	West Sedimentation Pond influent monitored at cell 1 of the pond	Field Parameters.	D
	2700GPM-IN	2700GPM TSS settling system influent monitored at cell 4 of the pond	Field Parameters.	P
May 28, 2026	SP-W-IN	West Sedimentation Pond influent monitored at cell 1 of the pond	Field Parameters.	D
May 29, 2026	SP-W-IN	West Sedimentation Pond influent monitored at cell 1 of the pond	Field Parameters.	D
	2700GPM-IN	2700GPM TSS settling system influent monitored at cell 4 of the pond	Field Parameters.	P
May 30, 2026	SP-E-IN	East Sedimentation Pond influent monitored at cell 1 of the pond	Field Parameters.	D
	WWTP-E-IN	East WWTP at the influent meter box	Field Parameters.	D
	WWTP-E-OUT	East WWTP at the effluent meter box		
	SP-W-IN	West Sedimentation Pond influent monitored at cell 1 of the pond	Field Parameters.	D
2700GPM-IN	2700GPM TSS settling system influent monitored at cell 4 of the pond	Field Parameters.	P	

**Notes:**

Monitoring frequency requirements under PE-111578 are indicated as follows:

D – daily monitoring of field parameters at WWTP and sedimentation pond influent and effluent stations.

M – monthly monitoring for all parameters at WWTP, sedimentation pond and receiving environment stations. Monthly monitoring for General parameters, except ammonia, nitrate and nitrite (*i.e.*, nitrogen species) are monitored weekly during blasting season.M<sub>2</sub> – bi-monthly monitoring for physical parameters at WWTP and sedimentation pond stations.

W – weekly monitoring for metals, chromium speciation and methylmercury at WWTP and sedimentation pond influent and effluent stations, effective June 25, 2025.

P – periodic monitoring for targeted parameters that is supplementary to PE-111578 requirements.

Q – quarterly toxicity testing.

### 3. Water Quality Results

#### 3.1 Summary of Reported Results

Analytical results and associated field measurements included in this weekly report (Report #116) are listed below in Table 3, with additional field measurements presented in Table B-4 (Appendix B) and Table C-3 (Appendix C). Testing for methylmercury, dioxins, furans and toxicity may require four weeks or longer to complete. Analytical results not reported will be included in future weekly reports. Reporting of results is pending for the following samples and parameters:

- SW-02, SW-03 and SW-07 collected May 3 (dioxins and furans);
- SW-01 and SW-04 collected May 4 (dioxins and furans);
- IDZ-W1, IDZ-W2 and WQR2 collected May 6 (total mercury, methylmercury, dioxins and furans);
- SP-E-IN, WWTP-E-IN and WWTP-E-OUT collected May 13 (dioxins and furans);
- SP-W-IN, 2700GPM-IN and W2700T1-OUT collected May 20 (total mercury and methylmercury);
- SP-E-IN and WWTP-E-IN collected May 25 (total mercury and methylmercury);
- WWTP-E-OUT collected May 25 (total mercury, methylmercury, dioxins, furans and acute toxicity);
- SP-W-IN and 2700GPM-IN collected May 25 (total mercury, methylmercury, dioxins and furans);
- W2700T2-OUT collected May 25 (total mercury, methylmercury, dioxins, furans and acute toxicity);
- IDZ-E1, IDZ-E2 and WQR1 collected May 26 (field and all analytical parameters, chronic toxicity);
- IDZ-W1, IDZ-W2 and WQR2 collected May 26 (field and all analytical parameters, chronic toxicity).

**Table 3:  
Summary of Analytical Results and Associated Field Measurements Included in Weekly Discharge and Compliance Report #116.**

<b>Sample</b>	<b>Description</b>	<b>Sampling Date</b>	<b>Parameters Reported</b>
SW-02	Lower Reach of Mill Creek (upstream of the third bridge)	April 27, 2026	Dioxins and Furans.
SW-03	Mill Creek Estuary		
SW-07	Upstream Mill Creek (at the diversion inlet)		
SW-01	Lower Reach of Woodfibre Creek (near the mouth)	April 28, 2026	Dioxins and Furans.
SW-04	Lower Reach of East Creek (near the outlet to the outfall culvert)		
OUT-02	Non-contact water diversion ditch outlet	May 16, 2026	Field, Physical and General Parameters, Total and Dissolved Metals, and Methylmercury.
SP-E-IN	East Sedimentation Pond influent monitored at cell 1 of the pond	May 21, 2026	Field, Physical and General Parameters, Total and Dissolved Metals, Hexavalent Chromium, and Methylmercury.
WWTP-E-IN	East WWTP at the influent meter box		
WWTP-E-OUT	East WWTP at the effluent meter box		
SP-E-IN	East Sedimentation Pond influent monitored at cell 1 of the pond	May 25, 2026	Field, Physical and General Parameters, Total and Dissolved Metals, and Hexavalent Chromium.
WWTP-E-IN	East WWTP at the influent meter box		
WWTP-E-OUT	East WWTP at the effluent meter box		Field, Physical and General Parameters, Total and Dissolved Metals, Hexavalent Chromium, VOCs, and PAHs.
SP-W-IN	West Sedimentation Pond influent monitored at cell 1 of the pond		Field, Physical and General Parameters, Total and Dissolved Metals, Hexavalent Chromium, VOCs, and PAHs.
2700GPM-IN	2700GPM TSS settling system at the influent meter box		
W2700T1-OUT	2700GPM TSS settling system at the outlet of Train 1		

### 3.2 Screening and Reporting Overview

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

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

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

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

not detected the lower-bound PCDD/F TEQ will equal zero. An “upper-bound PCDD/F TEQ” is calculated assuming a concentration equal to the detection limit for results reported as not detected. These two parameters span the range of possible TEQs if one or more of the PCDDs and PCDFs are reported as not detected.

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

A summary of reported and pending results is provided in Section 3.1. Results for effluents from East WWTP, 2700GPM TSS settling system, and East and West Sedimentation Ponds are discussed in Section 3.3 and Section 3.4, respectively. The water quality monitored at non-contact water diversion ditch outlets and in the receiving environment is described in Section 3.5 to Section 3.7. Sediment samples are collected annually at stations IDZ-E-SED and IDZ-W-SED and are discussed in Section 3.7 when they are reported. Sediment samples were last collected July 2025 and the analytical results were presented in Report #82.

### **3.3 East Catchment**

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

Results are presented for field measurements of influent quality for the East Sedimentation Pond and East WWTP influent and effluent quality collected May 24 – 30 (stations SP-E-IN, WWTP-E-IN and WWTP-E-OUT), as well as analytical results for samples collected May 21 (stations SP-E-IN, WWTP-E-IN and WWTP-E-OUT; as discussed in Report #115) and May 25 (stations SP-E-IN, WWTP-E-IN and WWTP-E-OUT).

Field measurements for the East WWTP effluent samples (WWTP-E-OUT) collected May 24 – 30 and the analytical samples collected May 21 (as discussed in Report #115) and May 25 met MDOs except for total mercury, methylmercury and hexavalent chromium on May 21 and dissolved oxygen on May 30 (Appendix B, Table B-1, Table B-3 and Table B-4). The depletion of dissolved oxygen was also observed in contact water during dry conditions in 2024 and 2025 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. Metal parameters above MDOs are tracked in Table 4.

East WWTP effluent was directed to the East Sedimentation Pond and there was no discharge from the pond to Howe Sound from May 24 – 30 (Section 1.2; Table B-5 of Appendix B). Therefore, water quality samples and field measurements were not collected at the SP-E-OUT discharge location.

### **3.4 West Catchment**

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

As discussed in Section 1.2, clarified sedimentation pond effluent from the 2700GPM TSS Settling System was recirculated to the West Sedimentation Pond and did not discharge to Howe Sound from SP-W-OUT during the monitoring period (May 24 – 30). Therefore, water quality samples and field measurements were not collected at the SP-W-OUT discharge location.

Results are presented for field measurements of influent and effluent quality for the West Sedimentation Pond and the 2700GPM TSS settling system collected May 24 – 30, as well as analytical samples collected May 25 (stations SP-W-IN, 2700GPM-IN and W2700T2-OUT; Appendix C, Table C-1 through Table C-3).

### **3.5 Non-Contact Water Diversion Ditch Outlets**

Analytical results were available at the time of reporting for the non-contact water diversion ditch outlet sample collected at station OUT-02 on May 16 (as discussed in Report #114). The analytical results, field parameters, and WQGs are summarized in Appendix D.

Parameter concentrations met WQGs except total aluminum and dissolved copper. Total aluminum and dissolved copper concentrations were above the long-term WQGs at station OUT-02 on May 16 (0.117 and 0.00054 mg/L, respectively). The total aluminum and dissolved copper concentrations measured at station OUT-02 are within the range of values observed during the pre-construction baseline monitoring of diversion ditch water quality (0.0833 to 0.433 mg/L for total aluminum and 0.00020 to 0.00095 mg/L for dissolved copper).

Total mercury and methylmercury analytical results were also available at the time of reporting for the sample collected at station OUT-02 on May 16 (as discussed in Report #114). The

methylmercury concentration was 0.000043 µg/L and met the WQG. The corresponding total mercury result met the WQG. Results are tabulated in Appendix D, Table D-2.

### **3.6 Freshwater and Estuarine Water Receiving Environment**

Dioxin and furans results were available at the time of reporting for freshwater and estuarine water samples collected at the Mill Creek estuary, mid-stream and background stations (SW-03, SW-02 and SW-07, respectively) on April 27 as well as near the mouth of Woodfibre Creek and East Creek (stations SW-01 and SW-04, respectively) on April 28 (as discussed in Report #112). The lower and upper bound PCDD/F TEQ concentrations measured in these samples ranged from 0 to 0.0823 pg/L and from 1.62 to 2.38 pg/L, respectively. The lower and upper bound PCDD/F TEQ concentrations at the downstream stations (SW-01, SW-02, SW-03, and SW-04) were within the concentration ranges observed in the pre-construction baseline monitoring program (0 pg/L and 0 to 5.25 pg/L, respectively) or within ranges observed at the background stations (0 to 0.610 pg/L and 0.431 to 5.20 pg/L, respectively). Results are tabulated in Appendix E, Table E-1 (freshwater) and Appendix F, Table F-1 (estuarine water).

### **3.7 Marine Water Receiving Environment**

Analytical results were not available at the time of reporting for marine water receiving environment samples.

### **3.8 Quality Control**

This section presents the results of the quality control (QC) evaluation for the PE-111578 weekly report (Table 4). The evaluation includes a review of field and lab QC, completeness of the weekly report (*e.g.*, pending data), completeness of the monitoring program, confirmation of record keeping, 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
<b>Reporting Period (May 24 – 30, Report #116)</b>		
<b>Authorized Works and Monitoring Program Evaluation</b>	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. Outfall 11 (OUT-11) has been constructed but is not in use. This item remains open.
<b>Report #116: Pending Data</b>	Analytical results not reported.	Field records, analytical and chronic toxicity results for receiving environment samples collected May 26 as well as total mercury, methylmercury, dioxins and furans results for contact and treated water samples collected May 25 are pending and will be included in future weekly reports when available. This item remains open.
<b>Report #116: WWTP Performance Evaluation</b>	Hexavalent chromium above the MDO.	The hexavalent chromium concentration was 0.00190 mg/L in the sample collected at WWTP-E-OUT on May 21 and was above the MDO (0.0015 mg/L). The hexavalent chromium concentration met MDO in the WWTP-E-OUT sample collected May 25. The WWTP treatment performance for hexavalent chromium will be evaluated through the end of June 2026 to determine if this is an isolated event or a recurring issue that requires additional investigation. This item remains open.
<b>Ongoing Items from Previous Weekly Reports</b>		
<b>Report #112: WWTP Performance Evaluation</b>	Total mercury and methylmercury above the MDO.	This item was first noted in Report #112. The total mercury and methylmercury concentrations in the samples collected at WWTP-E-OUT on April 15, 22, 27, May 7, 13 and 21 were above the MDOs. Increased incidence of total mercury and methylmercury concentrations above the MDOs in site contact waters occurred in late April 2025 through September 2025, coinciding with warmer and drier weather relative to winter months. In 2025, possible project related sources had been evaluated, and upstream contact water monitoring data indicate methylmercury was elevated in the hydrovac sump. Excess water from this sump is directed to the East WWTP. This production of methylmercury is attributed to microbially mediated methylation of total mercury in the bottom sediments of water management sumps, and transfer from the sump sediments to the water column. Enhanced monitoring for methylmercury has been implemented in May 2026. This item remains open.
<b>Report #112: Pending Data</b>	Analytical results not reported.	Dioxins and furans results for receiving environment samples collected April 27 and 28 are included in Report #116. This item is closed.
<b>Report #113: Pending Data</b>	Analytical results not reported.	Total mercury and methylmercury results for receiving environment samples collected May 6 as well as dioxins and furans results for receiving environment samples collected May 3, 4 and 6 are pending and will be included in future weekly reports when available. This item remains open.
<b>Report #114: Pending Data</b>	Analytical results not reported.	Previously pending field records and analytical results for the non-contact water diversion ditch outlet sample collected May 16 are included in Report #116. Dioxins and furans results for contact and treated water samples collected May 13 are pending and will be included in future weekly reports when available. This item remains open.
<b>Report #115: Pending Data</b>	Analytical results not reported.	Previously pending analytical results for contact and treated water samples collected May 21 are included in Report #116. Total mercury and methylmercury results for contact and treated water samples collected May 20 are pending and will be included in future weekly reports when available. This item remains open.

**Notes:**

Result QA/QC screening includes the evaluation of field and lab QC results, comparison of total and dissolved metal results and review for modified detection limits.

Pending data are outstanding results from monitoring samples reported in the current or previous weekly reports.

Authorized works and monitoring program evaluation is an assessment of the completeness of the authorized works and monitoring program compared to PE-111578 specified or implied requirements.

WWTP performance evaluation is an assessment of WWTP effluent quality compared to operational MDOs.

Data QC indicates an evaluation of data trends or inter-parameter relationships that suggest a test result may not be representative of water quality at the time of monitoring.

Non-compliant discharge indicates exceedance of a discharge limit or a discharge that bypasses the sedimentation pond discharge location.

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

#### 4. Closure

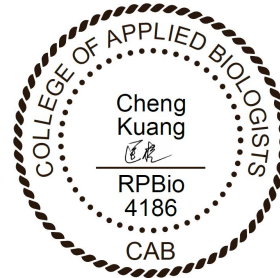
This weekly report is a desktop review by Lorax of the PE-111578 discharge and compliance monitoring program records, reports and results provided by Woodfibre LNG and prime contractor McDermott International and their sub-contractors. The records reviewed and analyzed by Lorax include ALS Environmental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

Regards,

**LORAX ENVIRONMENTAL SERVICES LTD.**



**Holly Pelletier, B.Sc., P.Geo.  
Environmental Geoscientist**



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

***Appendix A:  
Figures and Site Images***



World Imagery: District of Squamish. Additional imagery provided by McDermott International captured June 3rd, 2026.

**LEGEND**

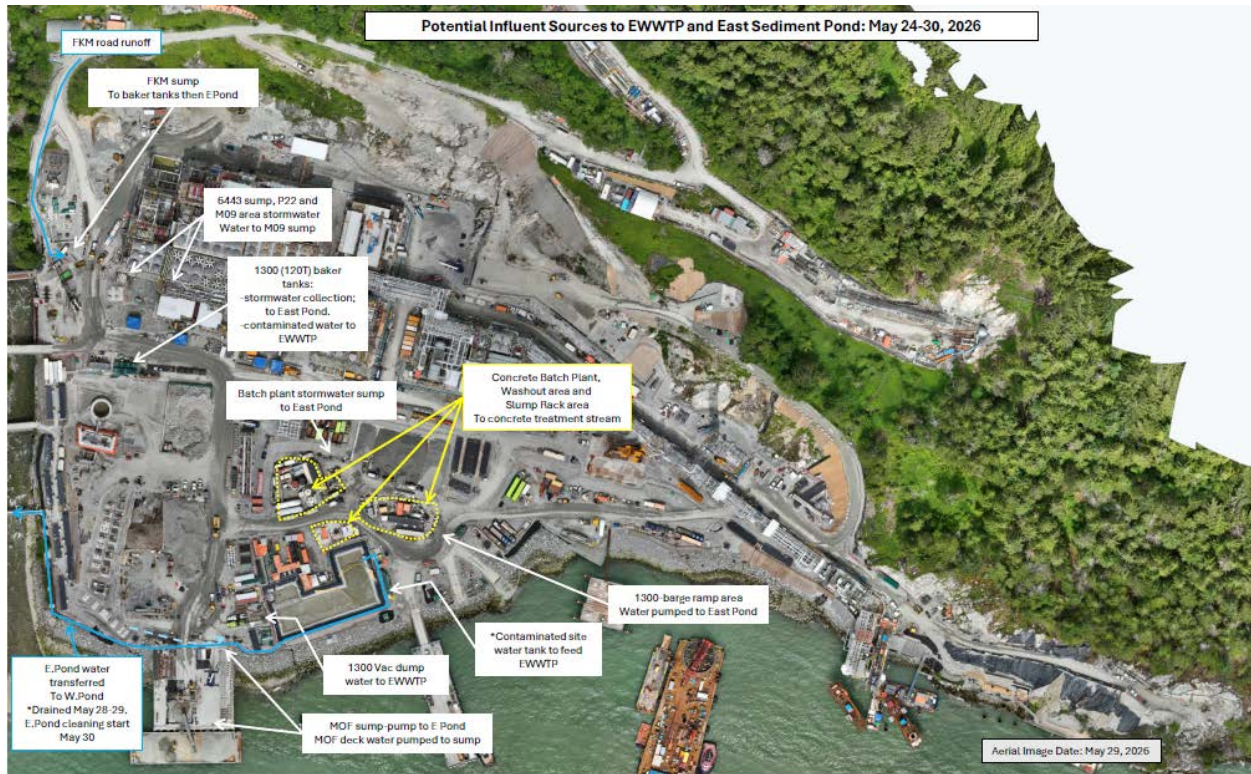
- Freshwater Monitoring Station
- ⊕ Marine Water Monitoring Station
- ⊕ Clean Water Diversion Discharge Station
- ⊕ Sedimentation Pond Monitoring Stations (Water Quality)
- ⊕ Wastewater Treatment Plant (WWTP)
- Certified Project Area
- Watercourse
- Non-Contact Ditch
- Culvert / Outfall / Pipeline
-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

DATE SAVED: Jun 05, 2026  
 DRAWN BY: DM  
 REVIEWED: PM  
 VERSION: 1

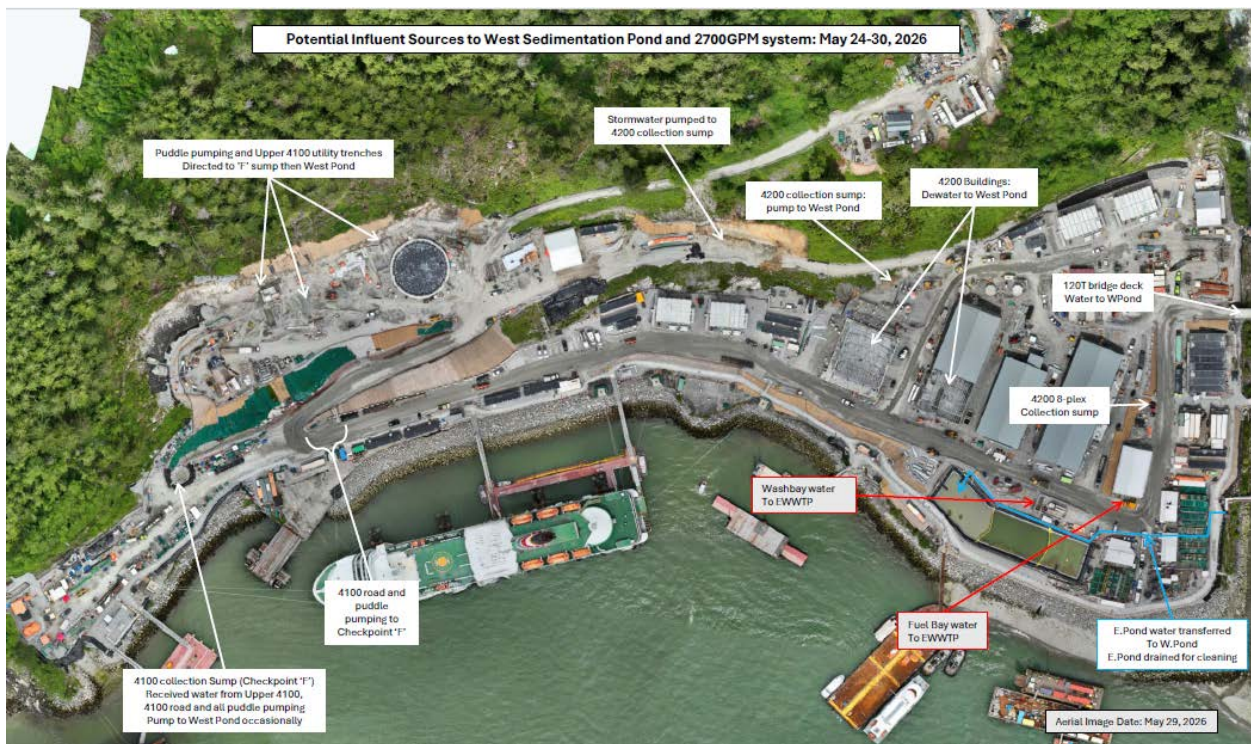
Coordinate System: NAD 1983 UTM Zone 10N  
 Projection: Transverse Mercator  
 Datum: North American 1983  
 Units: Metre  
 1:6,000



CLIENT: Woodfibre LNG  
 PROJECT: Woodfibre LNG Project Construction Phase  
 TITLE: Site Layout and Water Quality Monitoring Stations for PE-111578 (May 30, 2026)  
 PROJECT #: A825-1  
 FIGURE: 1



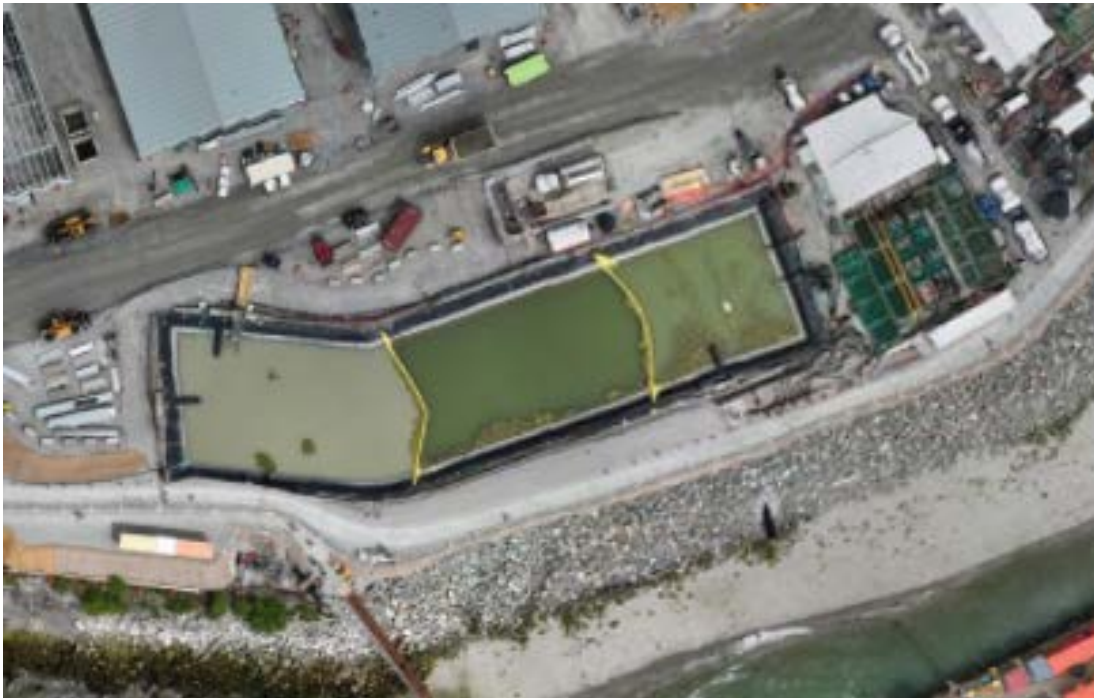
**Figure 2: East Catchment contact water management facilities (May 24 – 30).**



**Figure 3: West Catchment contact water management facilities (May 24 – 30).**



**Figure 4:** Aerial view of the East Sedimentation Pond (May 29, 2026). The East WWTP is located on the left side of the pond. The pond was cleaned May 28 – 29, 2026.



**Figure 5:** Aerial view of the West Sedimentation Pond (May 29, 2026).

***Appendix B:  
East Catchment Monitoring Results***

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

Parameter	Unit	Lowest Applicable Guideline <sup>1</sup>		PE-111578 Discharge Limit	Station WWTP-E-IN	Station WWTP-E-IN	Station WWTP-E-OUT	Station WWTP-E-OUT
					Influent	Influent	Effluent	Effluent
					WWTP-E-IN	WWTP-E-IN	WWTP-E-OUT	WWTP-E-OUT
					VA26B2702-001	VA26B3108-002	VA26B2702-003	VA26B3108-003
		Long Term	Short Term		2026-05-21 8:21	2026-05-25 8:09	2026-05-21 14:34	2026-05-25 14:26
<b>General Parameters</b>								
pH - Field	pH units	- <sup>2</sup>	-	5.5 - 9.0	7.4	8.0	6.61	6.6
Specific Conductivity - Field	µS/cm	-	-	-	1135	887	1059	925
Temperature - Field	°C	-	-	-	16.4	18.8	18.7	18.8
Salinity - Field	ppt	-	-	-	0.57	0.44	0.53	0.46
Turbidity - Field	NTU	-	-	-	16.38	8.48	1.37	2.63
TSS	mg/L	-	-	25 or 75 <sup>5</sup>	4.7	<3.0	<3.0	<3.0
Dissolved Oxygen - Field	mg/L	≥8	-	-	10.03	8.97	8.76	9.52
Total Hardness	mg/L	-	-	-	103	62.9	37.7	24.1
Dissolved Hardness	mg/L	-	-	-	103	61.6	35.0	23.6
<b>Anions and Nutrients</b>								
Sulphate	mg/L	-	-	-	207	291	384	297
Chloride	mg/L	-	-	-	3.94	7.48	9.92	7.66
Fluoride	mg/L	-	1.5	-	0.049	0.129	0.127	0.143
Ammonia (N-NH <sub>3</sub> )	mg/L	1.4-14 <sup>3</sup>	9.4-92 <sup>3</sup>	-	0.0169	0.0345	0.0296	0.0623
Nitrite (N-NO <sub>2</sub> )	mg/L	-	-	-	0.0031	0.0064	0.007	0.0073
Nitrate (N-NO <sub>3</sub> )	mg/L	3.7	339	-	0.0421	0.0537	0.237	0.0594
Total Organic Carbon (TOC)	mg/L	-	-	-	2.98	3.37	3.78	2.75
Dissolved Organic Carbon (DOC)	mg/L	-	-	-	2.94	3.1	2.97	2.57
<b>Total Metals</b>								
Aluminum, total (T-Al)	mg/L	-	-	-	1.03	0.632	0.257	0.254
Antimony, total (T-Sb)	mg/L	-	0.27 <sup>4</sup>	-	0.00118	0.00117	0.00155	0.00122
Arsenic, total (T-As)	mg/L	0.0125	-	-	0.00176	0.00172	0.00165	0.00159
Barium, total (T-Ba)	mg/L	-	-	-	0.0309	0.0156	0.00393	0.00253
Beryllium, total (T-Be)	mg/L	0.1	-	-	<0.000020	<0.000020	<0.000020	<0.000020
Boron, total (T-B)	mg/L	1.2	-	-	0.051	0.04	0.047	0.04
Cadmium, total (T-Cd)	mg/L	0.00012	-	-	<0.0000350	<0.0000250	<0.0000400	<0.0000250
Chromium, total (T-Cr)	mg/L	-	-	-	0.00146	0.00108	0.0019	0.0009
Cobalt, total (T-Co)	mg/L	-	-	-	0.00034	0.00015	<0.00010	<0.00010
Copper, total (T-Cu)	mg/L	- <sup>2</sup>	- <sup>2</sup>	0.0043	0.00266	0.00186	0.00233	0.00153
Iron, total (T-Fe)	mg/L	-	-	-	0.719	0.326	0.067	0.052
Lead, total (T-Pb)	mg/L	- <sup>2</sup>	- <sup>2</sup>	0.0035	0.000645	0.000351	0.000254	0.000123
Manganese, total (T-Mn)	mg/L	0.1	-	-	0.0443	0.0178	0.00798	0.00603
Molybdenum, total (T-Mo)	mg/L	-	-	-	0.083	0.0805	0.105	0.0866
Nickel, total (T-Ni)	mg/L	0.0083	-	-	0.0006	<0.00050	<0.00050	<0.00050
Selenium, total (T-Se)	mg/L	0.002	-	-	0.000462	0.000272	0.00039	0.000286
Silver, total (T-Ag)	mg/L	0.0005	0.0037	-	<0.000010	<0.000010	<0.000010	<0.000010
Thallium, total (T-Tl)	mg/L	-	-	-	0.000018	0.000018	0.000022	0.000019
Uranium, total (T-U)	mg/L	-	-	-	0.00395	0.00576	0.00306	0.00498
Vanadium, total (T-V)	mg/L	- <sup>2</sup>	-	0.0081	0.00295	0.00253	0.00264	0.00237
Zinc, total (T-Zn)	mg/L	- <sup>2</sup>	- <sup>2</sup>	0.0133	0.008	0.004	0.0078	<0.0030
Hexavalent Chromium, total	mg/L	0.0015	-	-	0.00064	0.00066	<b>0.0019</b>	0.00064
<b>Dissolved Metals</b>								
Cadmium, dissolved (D-Cd)	mg/L	-	-	-	<0.0000250	<0.0000250	<0.0000300	<0.0000250
Copper, dissolved (D-Cu)	mg/L	-	-	-	0.00162	0.00141	0.0012	0.00142
Iron, dissolved (D-Fe)	mg/L	-	-	-	0.035	0.020	<0.010	<0.010
Lead, dissolved (D-Pb)	mg/L	-	-	-	<0.000050	<0.000050	<0.000050	<0.000050
Manganese, dissolved (D-Mn)	mg/L	-	-	-	0.0209	0.00553	0.00471	0.00389
Nickel, dissolved (D-Ni)	mg/L	-	-	-	<0.00050	<0.00050	<0.00050	<0.00050
Strontium, dissolved (D-Sr)	mg/L	-	-	-	0.438	0.227	0.181	0.122
Vanadium, dissolved (D-V)	mg/L	-	-	-	0.00165	0.00197	0.00267	0.00215
Zinc, dissolved (D-Zn)	mg/L	-	-	-	0.0029	0.0014	0.0017	0.0027
<b>Polycyclic Aromatic Hydrocarbons (PAHs)</b>								
Acenaphthene	mg/L	0.006	-	-	-	-	-	<0.000010
Acridine	mg/L	-	-	-	-	-	-	<0.000010
Anthracene	mg/L	-	-	-	-	-	-	<0.000010
Benz(a)anthracene	mg/L	-	-	-	-	-	-	<0.000010
Benzo(a)pyrene	mg/L	0.00001	-	-	-	-	-	<0.0000050
Chrysene	mg/L	0.0001	-	-	-	-	-	<0.000010
Fluoranthene	mg/L	-	-	-	-	-	-	<0.000010
Fluorene	mg/L	0.012	-	-	-	-	-	<0.000010
1-methylnaphthalene	mg/L	0.001	-	-	-	-	-	<0.000010
2-methylnaphthalene	mg/L	0.001	-	-	-	-	-	<0.000010
Naphthalene	mg/L	0.001	-	-	-	-	-	<0.000050
Phenanthrene	mg/L	-	-	-	-	-	-	<0.000020
Pyrene	mg/L	-	-	-	-	-	-	<0.000010
Quinoline	mg/L	-	-	-	-	-	-	<0.000050
<b>Volatile Organic Compounds (VOCs)</b>								
Benzene	mg/L	0.59	6.0	-	-	-	-	<0.00050
Ethylbenzene	mg/L	0.07	1.0	-	-	-	-	<0.00050
Methyl-tert-butyl-ether	mg/L	5	0.44	-	-	-	-	<0.00050
Styrene	mg/L	-	-	-	-	-	-	<0.00050
Toluene	mg/L	0.03	3.0	-	-	-	-	<0.00040
Total Xylenes	mg/L	0.07	1.0	-	-	-	-	<0.00050
Chlorobenzene	mg/L	0.025	-	-	-	-	-	<0.00050
1,2-Dichlorobenzene	mg/L	0.042	-	-	-	-	-	<0.00050

**Notes:**

East catchment influents and East WWTP effluent were not discharged to Howe Sound. Results above screening values are only highlighted for comparative purposes.

Non-detect results are screened using the detection limit value.

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

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

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

The East Catchment did not discharge during the monitoring period (May 24 – 30).

<sup>1</sup> The lowest applicable guidelines from approved or working BC WQGs, Canadian (CCME) WQGs and Federal WQGs for marine waters.

<sup>2</sup> The WQG was not evaluated for parameters with discharge limits.

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

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

<sup>5</sup> The PE-111578 discharge limit for TSS is 25 mg/L under dry conditions and 75 mg/L for each day of Wet Conditions and for one day following the end of Wet Conditions.

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

Parameter	Unit	Lowest Applicable Guideline <sup>1</sup>		PE-111578 Discharge Limit	Station SP-E-IN	Station SP-E-IN
					Influent	Influent
		SP-E-IN	SP-E-IN			
		VA26B2702-002 2026-05-21 8:37	VA26B3108-001 2026-05-25 8:32			
<b>General Parameters</b>						
pH - Field	pH units	- <sup>2</sup>	-	5.5 - 9.0	7.1	7.1
Specific Conductivity - Field	µS/cm	-	-	-	1135	920
Temperature - Field	°C	-	-	-	17.4	18.8
Salinity - Field	ppt	-	-	-	0.57	0.5
Turbidity - Field	NTU	-	-	-	32.76	40.5
TSS	mg/L	-	-	25 or 75 <sup>5</sup>	133	35.1
Dissolved Oxygen - Field	mg/L	≥8	-	-	10.14	8.7
Total Hardness	mg/L	-	-	-	79.7	48.7
Dissolved Hardness	mg/L	-	-	-	66.3	43.3
<b>Anions and Nutrients</b>						
Sulphate	mg/L	-	-	-	428	293
Chloride	mg/L	-	-	-	7.63	9.17
Fluoride	mg/L	-	1.5	-	0.114	0.158
Ammonia (N-NH <sub>3</sub> )	mg/L	14 <sup>3</sup>	92 <sup>3</sup>	-	0.031	0.0398
Nitrite (N-NO <sub>2</sub> )	mg/L	-	-	-	0.012	0.0164
Nitrate (N-NO <sub>3</sub> )	mg/L	3.7	339	-	0.222	0.0843
Total Organic Carbon (TOC)	mg/L	-	-	-	5.31	4.74
Dissolved Organic Carbon (DOC)	mg/L	-	-	-	2.85	3.5
<b>Total Metals</b>						
Aluminum, total (T-Al)	mg/L	-	-	-	7.96	2.05
Antimony, total (T-Sb)	mg/L	-	0.27 <sup>4</sup>	-	0.00146	0.00125
Arsenic, total (T-As)	mg/L	0.0125	-	-	0.0063	0.00198
Barium, total (T-Ba)	mg/L	-	-	-	0.0457	0.0203
Beryllium, total (T-Be)	mg/L	0.1	-	-	0.00012	0.000036
Boron, total (T-B)	mg/L	1.2	-	-	0.04	0.056
Cadmium, total (T-Cd)	mg/L	0.00012	-	-	<0.0000750	<0.0000450
Chromium, total (T-Cr)	mg/L	-	-	-	0.00883	0.0018
Cobalt, total (T-Co)	mg/L	-	-	-	0.00191	0.00066
Copper, total (T-Cu)	mg/L	- <sup>2</sup>	- <sup>2</sup>	0.0043	0.0091	0.0029
Iron, total (T-Fe)	mg/L	-	-	-	5.24	1.55
Lead, total (T-Pb)	mg/L	- <sup>2</sup>	- <sup>2</sup>	0.0035	0.00351	0.00144
Manganese, total (T-Mn)	mg/L	0.1	-	-	0.193	0.0675
Molybdenum, total (T-Mo)	mg/L	-	-	-	0.101	0.0917
Nickel, total (T-Ni)	mg/L	0.0083	-	-	0.00168	0.0006
Selenium, total (T-Se)	mg/L	0.002	-	-	0.000523	0.000282
Silver, total (T-Ag)	mg/L	0.0005	0.0037	-	0.000011	<0.000010
Thallium, total (T-Tl)	mg/L	-	-	-	0.000029	0.000022
Uranium, total (T-U)	mg/L	-	-	-	0.00705	0.00693
Vanadium, total (T-V)	mg/L	- <sup>2</sup>	-	0.0081	0.0108	0.00496
Zinc, total (T-Zn)	mg/L	- <sup>2</sup>	- <sup>2</sup>	0.0133	0.0396	0.013
Hexavalent Chromium, total	mg/L	0.0015	-	-	0.00085	0.00092
<b>Dissolved Metals</b>						
Cadmium, dissolved (D-Cd)	mg/L	-	-	-	<0.0000250	<0.0000300
Copper, dissolved (D-Cu)	mg/L	-	-	-	0.00104	0.00171
Iron, dissolved (D-Fe)	mg/L	-	-	-	0.011	<0.010
Lead, dissolved (D-Pb)	mg/L	-	-	-	<0.000050	<0.000050
Manganese, dissolved (D-Mn)	mg/L	-	-	-	0.0254	0.0111
Nickel, dissolved (D-Ni)	mg/L	-	-	-	<0.00050	<0.00050
Strontium, dissolved (D-Sr)	mg/L	-	-	-	0.315	0.169
Vanadium, dissolved (D-V)	mg/L	-	-	-	0.00179	0.00235
Zinc, dissolved (D-Zn)	mg/L	-	-	-	0.0021	0.0024
<b>Polycyclic Aromatic Hydrocarbons (PAHs)</b>						
Acenaphthene	mg/L	0.006	-	-	-	-
Acridine	mg/L	-	-	-	-	-
Anthracene	mg/L	-	-	-	-	-
Benz(a)anthracene	mg/L	-	-	-	-	-
Benzo(a)pyrene	mg/L	0.00001	-	-	-	-
Chrysene	mg/L	0.0001	-	-	-	-
Fluoranthene	mg/L	-	-	-	-	-
Fluorene	mg/L	0.012	-	-	-	-
1-methylnaphthalene	mg/L	0.001	-	-	-	-
2-methylnaphthalene	mg/L	0.001	-	-	-	-
Naphthalene	mg/L	0.001	-	-	-	-
Phenanthrene	mg/L	-	-	-	-	-
Pyrene	mg/L	-	-	-	-	-
Quinoline	mg/L	-	-	-	-	-
<b>Volatile Organic Compounds (VOCs)</b>						
Benzene	mg/L	0.59	6.0	-	-	-
Ethylbenzene	mg/L	0.07	1.0	-	-	-
Methyl-tert-butyl-ether	mg/L	5	0.44	-	-	-
Styrene	mg/L	-	-	-	-	-
Toluene	mg/L	0.03	3.0	-	-	-
Total Xylenes	mg/L	0.07	1.0	-	-	-
Chlorobenzene	mg/L	0.025	-	-	-	-
1,2-Dichlorobenzene	mg/L	0.042	-	-	-	-

**Notes:**

East catchment influents and East WWTP effluent were not discharged to Howe Sound. Results above screening values are only highlighted for comparative purposes.

Non-detect results are screened using the detection limit value.

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

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

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

The East Catchment did not discharge during the monitoring period (May 24 – 30).

<sup>1</sup> The lowest applicable guidelines from approved or working BC WQGs, Canadian (CCME) WQGs and Federal WQGs for marine waters.

<sup>2</sup> The WQG was not evaluated for parameters with discharge limits.

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

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

<sup>5</sup> The PE-111578 discharge limit for TSS is 25 mg/L under dry conditions and 75 mg/L for each day of Wet Conditions and for one day following the end of Wet Conditions.

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

Parameter					Total Methylmercury	Total Mercury
Unit					µg/L	µg/L
Lowest Applicable Guideline <sup>1</sup>					0.0001 <sup>2</sup>	0.0016 - 0.0042 <sup>3,4</sup>
Station	Water Type	Sample ID	Lab ID	Sampling Date		
Influent						
SP-E-IN	Influent	SP-E-IN	VA26B2702-002	2026-05-21	<b><u>0.000838</u></b>	<b><u>0.0356</u></b>
WWTP-E-IN	Influent	WWTP-E-IN	VA26B2702-001	2026-05-21	<b><u>0.000126</u></b>	<b><u>0.00454</u></b>
Effluent						
WWTP-E-OUT	Effluent	WWTP-E-OUT	VA26B2702-003	2026-05-21	<b><u>0.000255</u></b>	<b><u>0.00396</u></b>

**Notes:**

East catchment influents and effluents were not discharged to Howe Sound. Results above screening values are only highlighted for comparative purposes. Non-detect results are screened using the detection limit value.

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

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

<sup>2</sup> 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.

<sup>3</sup> CCME guideline for total mercury = 0.016 µg/L.

<sup>4</sup> When MeHg ≤ 0.5% of total Hg, BC WQG = 0.02 µg/L. When MeHg > 0.5% of total Hg, BC WQG = 0.0001/(MeHg/Total Hg). Detection limit values are used to calculate the WQG for result reported as not detected.

**Table B-4:  
East Catchment Field Measurements Collected During the Monitoring Period (May 24 – 30).**

Parameter	Temperature	Dissolved Oxygen (DO)	Salinity	Turbidity	Estimated TSS <sup>3</sup>	pH	Specific Conductivity	Visibility of Sheen		
Unit	°C	mg/L	ppt	NTU	mg/L	s.u.	µS/cm			
<b>PE-111578 Discharge Limit</b>	-	-	-	-	25 or 75 <sup>6</sup>	5.5 - 9.0	-	-		
<b>Lowest Applicable Guideline<sup>1</sup></b>	-	≥8	-	-	- <sup>2</sup>	- <sup>2</sup>	-	-		
Station ID	Water Type	Date								
Influent <sup>4</sup>										
SP-E-IN	Influent	2026-05-24 15:35	22.5	10.87	0.52	10.26	10.7	7.10	1042	No
SP-E-IN	Influent	2026-05-25 8:32	18.8	8.70	0.50	40.5	33.2	7.10	920	No
SP-E-IN	Influent	2026-05-26 10:17	15.7	9.95	0.44	27.14	23.2	7.19	895	No
SP-E-IN	Influent	2026-05-27 10:53	20.4	11.13	0.47	23.14	20.3	7.32	950	No
SP-E-IN	Influent	2026-05-30 13:58	23.8	8.98	0.49	87.31	68.1	8.67	989	No
WWTP-E-IN	Influent	2026-05-25 8:09	18.8	8.97	0.44	8.48	9.3	8.00	887	No
WWTP-E-IN	Influent	2026-05-30 13:52	21.1	8.21	0.39	26.84	23.0	7.57	797	No
Effluent <sup>5</sup>										
WWTP-E-OUT	Effluent	2026-05-25 14:26	18.8	9.52	0.46	2.63	5.0	6.60	925	No
WWTP-E-OUT	Effluent	2026-05-30 13:47	18.8	<b><u>7.23</u></b>	0.51	3.13	5.3	6.21	1018	No

**Notes:**

The east catchment did not discharge to Howe Sound during the monitoring period (May 24 – 30). Results above screening values are highlighted for comparative purposes.

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

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

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

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

<sup>2</sup> The WQG was not evaluated for parameters with discharge limits.

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

<sup>4</sup> 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 May 28 and 29 as the East Sedimentation Pond level was lowered below the safe access point for pond cleaning. Daily field measurements for station WWTP-E-IN were not collected on May 24 and May 26 – 29 as the East WWTP was not operational at the time of monitoring.

<sup>5</sup> There was no discharge at the authorized discharge location (SP-E-OUT) during the monitoring period (May 24 – 30), therefore daily field measurements for SP-E-OUT were not collected on those days. Daily field measurements for station WWTP-E-OUT were not collected on May 24 and May 26 – 29 as the East WWTP was not operational at the time of monitoring.

<sup>6</sup> The PE-111578 discharge limit for TSS is 25 mg/L under dry conditions and 75 mg/L for each day of Wet Conditions and for one day following the end of Wet Conditions.

**Table B-5:  
East Catchment Daily Discharge Volumes for the Monitoring Period (May 24 – 30).**

	East Sedimentation Pond Effluent	Transfer to West Sedimentation Pond	East WWTP Treated Effluent (Station WWTP-E-OUT) <sup>2</sup>	Discharge to Howe Sound (Station SP-E-OUT)
Units	m <sup>3</sup>	m <sup>3</sup>	m <sup>3</sup>	m <sup>3</sup>
<b>PE-111578 Discharge Limit</b>	-	-	1,100	- <sup>1</sup>
Date				
2026-05-24	0	0	143	0
2026-05-25	0	0	473	0
2026-05-26	0	0	167	0
2026-05-27	0	0	0.42	0
2026-05-28	0	51	0	0
2026-05-29	0	0	0	0
2026-05-30	0	0	80	0

**Notes:**

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

<sup>1</sup> 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<sup>3</sup>/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.

<sup>2</sup> East WWTP treated effluent was recirculated to the East Sedimentation Pond.

***Appendix C:  
West Catchment Monitoring Results***

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

Parameter	Unit	Lowest Applicable Guideline <sup>1</sup>		PE-111578 Discharge Limit	Station 2700GPM-IN	Station W2700T2-OUT
					Influent	Effluent
		W2700-IN	W2700T2-OUT			
		VA26B3106-002 2026-05-25 12:17	VA26B3106-003 2026-05-25 12:42			
<b>General Parameters</b>						
pH - Field	pH units	- <sup>2</sup>	-	5.5 - 9.0	8.2	8.1
Specific Conductivity - Field	µS/cm	-	-	-	663	666
Temperature - Field	°C	-	-	-	18.7	19.3
Salinity - Field	ppt	-	-	-	0.32	0.33
Turbidity - Field	NTU	-	-	-	11.42	3.74
TSS	mg/L	-	-	25 or 75 <sup>5</sup>	9.1	4.1
Dissolved Oxygen - Field	mg/L	≥8	-	-	9.16	8.65
Total Hardness	mg/L	-	-	-	62.3	59.5
Dissolved Hardness	mg/L	-	-	-	60.2	59.8
<b>Anions and Nutrients</b>						
Sulphate	mg/L	-	-	-	188	189
Chloride	mg/L	-	-	-	7.71	7.8
Fluoride	mg/L	-	1.5	-	0.111	0.113
Ammonia (N-NH <sub>3</sub> )	mg/L	0.87-1.4 <sup>3</sup>	5.8-9.4 <sup>3</sup>	-	0.0146	0.0386
Nitrite (N-NO <sub>2</sub> )	mg/L	-	-	-	0.0121	0.0116
Nitrate (N-NO <sub>3</sub> )	mg/L	3.7	339	-	0.0515	0.0554
Total Organic Carbon (TOC)	mg/L	-	-	-	4.51	4.38
Dissolved Organic Carbon (DOC)	mg/L	-	-	-	3.87	3.65
<b>Total Metals</b>						
Aluminum, total (T-Al)	mg/L	-	-	-	0.458	0.197
Antimony, total (T-Sb)	mg/L	-	0.27 <sup>4</sup>	-	0.00083	0.00087
Arsenic, total (T-As)	mg/L	0.0125	-	-	0.00153	0.00139
Barium, total (T-Ba)	mg/L	-	-	-	0.00669	0.0036
Beryllium, total (T-Be)	mg/L	0.1	-	-	<0.000020	<0.000020
Boron, total (T-B)	mg/L	1.2	-	-	0.01	<0.010
Cadmium, total (T-Cd)	mg/L	0.00012	-	-	0.000017	<0.0000150
Chromium, total (T-Cr)	mg/L	-	-	-	0.00051	<0.00050
Cobalt, total (T-Co)	mg/L	-	-	-	0.00015	<0.00010
Copper, total (T-Cu)	mg/L	- <sup>2</sup>	- <sup>2</sup>	0.0043	0.00268	0.00268
Iron, total (T-Fe)	mg/L	-	-	-	0.287	0.087
Lead, total (T-Pb)	mg/L	- <sup>2</sup>	- <sup>2</sup>	0.0035	0.000317	0.000629
Manganese, total (T-Mn)	mg/L	0.1	-	-	0.0314	0.0185
Molybdenum, total (T-Mo)	mg/L	-	-	-	0.0445	0.0475
Nickel, total (T-Ni)	mg/L	0.0083	-	-	<0.00050	<0.00050
Selenium, total (T-Se)	mg/L	0.002	-	-	0.000226	0.000216
Silver, total (T-Ag)	mg/L	0.0005	0.0037	-	<0.000010	<0.000010
Thallium, total (T-Tl)	mg/L	-	-	-	0.00004	0.000034
Uranium, total (T-U)	mg/L	-	-	-	0.00453	0.00444
Vanadium, total (T-V)	mg/L	- <sup>2</sup>	-	0.0081	0.00164	0.00135
Zinc, total (T-Zn)	mg/L	- <sup>2</sup>	- <sup>2</sup>	0.0133	<0.0030	<0.0030
Hexavalent Chromium, total	mg/L	0.0015	-	-	<0.00050	<0.00050
<b>Dissolved Metals</b>						
Cadmium, dissolved (D-Cd)	mg/L	-	-	-	<0.0000150	<0.0000150
Copper, dissolved (D-Cu)	mg/L	-	-	-	0.00103	0.00123
Iron, dissolved (D-Fe)	mg/L	-	-	-	0.019	0.015
Lead, dissolved (D-Pb)	mg/L	-	-	-	<0.000050	0.000066
Manganese, dissolved (D-Mn)	mg/L	-	-	-	0.00842	0.00937
Nickel, dissolved (D-Ni)	mg/L	-	-	-	<0.00050	<0.00050
Strontium, dissolved (D-Sr)	mg/L	-	-	-	0.109	0.107
Vanadium, dissolved (D-V)	mg/L	-	-	-	0.0012	0.0011
Zinc, dissolved (D-Zn)	mg/L	-	-	-	<0.0010	0.0013
<b>Polycyclic Aromatic Hydrocarbons (PAHs)</b>						
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	-	-	<0.000050	<0.000050
Chrysene	mg/L	0.0001	-	-	<0.000010	<0.000010
Fluoranthene	mg/L	-	-	-	<0.000010	<0.000010
Fluorene	mg/L	0.012	-	-	<0.000010	<0.000010
1-methylnaphthalene	mg/L	0.001	-	-	<0.000010	<0.000010
2-methylnaphthalene	mg/L	0.001	-	-	<0.000010	<0.000010
Naphthalene	mg/L	0.001	-	-	<0.000050	<0.000050
Phenanthrene	mg/L	-	-	-	<0.000020	<0.000020
Pyrene	mg/L	-	-	-	<0.000010	<0.000010
Quinoline	mg/L	-	-	-	<0.000050	<0.000050
<b>Volatile Organic Compounds (VOCs)</b>						
Benzene	mg/L	0.59	6.0	-	<0.00050	<0.00050
Ethylbenzene	mg/L	0.07	1.0	-	<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	0.03	3.0	-	<0.00040	<0.00040
Total Xylenes	mg/L	0.07	1.0	-	<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:**

West catchment influents were not discharged to Howe Sound. Influent results above screening values are only highlighted for comparative purposes.

Non-detect results are screened using the detection limit value.

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

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

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

The West Catchment did not discharge during the monitoring period (May 24 – 30).

<sup>1</sup> The lowest applicable guidelines from approved or working BC WQGs, Canadian (CCME) WQGs and Federal WQGs for marine waters.

<sup>2</sup> The WQG was not evaluated for parameters with discharge limits.

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

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

<sup>5</sup> The PE-111578 discharge limit for TSS is 25 mg/L under dry conditions and 75 mg/L for each day of Wet Conditions and for one day following the end of Wet Conditions.

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

Parameter	Unit	Lowest Applicable Guideline <sup>1</sup>		PE-111578 Discharge Limit	Station SP-W-IN
		Long Term	Short Term		Influent
					SP-W-IN VA26B3106-001
					2026-05-25 12:04
<b>General Parameters</b>					
pH - Field	pH units	- <sup>2</sup>	-	5.5 - 9.0	8.1
Specific Conductivity - Field	µS/cm	-	-	-	650
Temperature - Field	°C	-	-	-	18.6
Salinity - Field	ppt	-	-	-	0.32
Turbidity - Field	NTU	-	-	-	12.89
TSS	mg/L	-	-	25 or 75 <sup>5</sup>	11.5
Dissolved Oxygen - Field	mg/L	≥8	-	-	9.02
Total Hardness	mg/L	-	-	-	62.5
Dissolved Hardness	mg/L	-	-	-	59.6
<b>Anions and Nutrients</b>					
Sulphate	mg/L	-	-	-	184
Chloride	mg/L	-	-	-	7.58
Fluoride	mg/L	-	1.5	-	0.113
Ammonia (N-NH <sub>3</sub> )	mg/L	1.4 <sup>3</sup>	9.4 <sup>3</sup>	-	0.0598
Nitrite (N-NO <sub>2</sub> )	mg/L	-	-	-	0.0117
Nitrate (N-NO <sub>3</sub> )	mg/L	3.7	339	-	0.0624
Total Organic Carbon (TOC)	mg/L	-	-	-	4.18
Dissolved Organic Carbon (DOC)	mg/L	-	-	-	3.47
<b>Total Metals</b>					
Aluminum, total (T-Al)	mg/L	-	-	-	0.715
Antimony, total (T-Sb)	mg/L	-	0.27 <sup>4</sup>	-	0.00085
Arsenic, total (T-As)	mg/L	0.0125	-	-	0.0015
Barium, total (T-Ba)	mg/L	-	-	-	0.00844
Beryllium, total (T-Be)	mg/L	0.1	-	-	<0.000020
Boron, total (T-B)	mg/L	1.2	-	-	<0.010
Cadmium, total (T-Cd)	mg/L	0.00012	-	-	<0.0000200
Chromium, total (T-Cr)	mg/L	-	-	-	0.00059
Cobalt, total (T-Co)	mg/L	-	-	-	0.00022
Copper, total (T-Cu)	mg/L	- <sup>2</sup>	- <sup>2</sup>	0.0043	0.00125
Iron, total (T-Fe)	mg/L	-	-	-	0.478
Lead, total (T-Pb)	mg/L	- <sup>2</sup>	- <sup>2</sup>	0.0035	0.000417
Manganese, total (T-Mn)	mg/L	0.1	-	-	0.0371
Molybdenum, total (T-Mo)	mg/L	-	-	-	0.0457
Nickel, total (T-Ni)	mg/L	0.0083	-	-	<0.00050
Selenium, total (T-Se)	mg/L	0.002	-	-	0.000206
Silver, total (T-Ag)	mg/L	0.0005	0.0037	-	<0.000010
Thallium, total (T-Tl)	mg/L	-	-	-	0.000038
Uranium, total (T-U)	mg/L	-	-	-	0.00443
Vanadium, total (T-V)	mg/L	- <sup>2</sup>	-	0.0081	0.002
Zinc, total (T-Zn)	mg/L	- <sup>2</sup>	- <sup>2</sup>	0.0133	0.004
Hexavalent Chromium, total	mg/L	0.0015	-	-	<0.00050
<b>Dissolved Metals</b>					
Cadmium, dissolved (D-Cd)	mg/L	-	-	-	<0.0000150
Copper, dissolved (D-Cu)	mg/L	-	-	-	0.00068
Iron, dissolved (D-Fe)	mg/L	-	-	-	0.011
Lead, dissolved (D-Pb)	mg/L	-	-	-	<0.000050
Manganese, dissolved (D-Mn)	mg/L	-	-	-	0.00897
Nickel, dissolved (D-Ni)	mg/L	-	-	-	<0.00050
Strontium, dissolved (D-Sr)	mg/L	-	-	-	0.109
Vanadium, dissolved (D-V)	mg/L	-	-	-	0.00114
Zinc, dissolved (D-Zn)	mg/L	-	-	-	<0.0010
<b>Polycyclic Aromatic Hydrocarbons (PAHs)</b>					
Acenaphthene	mg/L	0.006	-	-	<0.000010
Acridine	mg/L	-	-	-	<0.000010
Anthracene	mg/L	-	-	-	<0.000010
Benz(a)anthracene	mg/L	-	-	-	<0.000010
Benzo(a)pyrene	mg/L	0.00001	-	-	<0.0000050
Chrysene	mg/L	0.0001	-	-	<0.000010
Fluoranthene	mg/L	-	-	-	<0.000010
Fluorene	mg/L	0.012	-	-	<0.000010
1-methylnaphthalene	mg/L	0.001	-	-	<0.000010
2-methylnaphthalene	mg/L	0.001	-	-	<0.000010
Naphthalene	mg/L	0.001	-	-	<0.000050
Phenanthrene	mg/L	-	-	-	<0.000020
Pyrene	mg/L	-	-	-	<0.000010
Quinoline	mg/L	-	-	-	<0.000050
<b>Volatile Organic Compounds (VOCs)</b>					
Benzene	mg/L	0.59	6.0	-	<0.00050
Ethylbenzene	mg/L	0.07	1.0	-	<0.00050
Methyl-tert-butyl-ether	mg/L	5	0.44	-	<0.00050
Styrene	mg/L	-	-	-	<0.00050
Toluene	mg/L	0.03	3.0	-	<0.00040
Total Xylenes	mg/L	0.07	1.0	-	<0.00050
Chlorobenzene	mg/L	0.025	-	-	<0.00050
1,2-Dichlorobenzene	mg/L	0.042	-	-	<0.00050

**Notes:**

West catchment influents were not discharged to Howe Sound. Influent results above screening values are only highlighted for comparative purposes.

Non-detect results are screened using the detection limit value.

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

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

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

The West Catchment did not discharge during the monitoring period (May 24 – 30).

<sup>1</sup> The lowest applicable guidelines from approved or working BC WQGs, Canadian (CCME) WQGs and Federal WQGs for marine waters.

<sup>2</sup> The WQG was not evaluated for parameters with discharge limits.

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

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

<sup>5</sup> The PE-111578 discharge limit for TSS is 25 mg/L under dry conditions and 75 mg/L for each day of Wet Conditions and for one day following the end of Wet Conditions.

**Table C-3:  
West Catchment Field Measurements Collected During the Monitoring Period (May 24 – 30).**

Parameter			Temperature	Dissolved Oxygen (DO)	Salinity	Turbidity	Estimated TSS <sup>3</sup>	pH	Specific Conductivity	Visibility of Sheen
Unit			°C	mg/L	ppt	NTU	mg/L	s.u.	µS/cm	
<b>PE-111578 Discharge Limit</b>			-	-	-	-	25 or 75 <sup>6</sup>	5.5 - 9.0	-	-
<b>Lowest Applicable Guideline<sup>1</sup></b>			-	≥8	-	-	- <sup>2</sup>	- <sup>2</sup>	-	-
Station ID	Water Type	Date								
<b>Influent<sup>4</sup></b>										
SP-W-IN	Influent	2026-05-24 10:59	20.4	9.03	0.34	12.47	12.3	7.60	705	No
SP-W-IN	Influent	2026-05-25 12:04	18.6	9.02	0.32	12.89	12.6	8.10	650	No
SP-W-IN	Influent	2026-05-26 9:24	16.1	9.8	0.3	29.45	25.0	7.44	622	No
SP-W-IN	Influent	2026-05-27 14:08	20.6	9.37	0.31	22.13	19.5	7.96	632	No
SP-W-IN	Influent	2026-05-28 14:16	25.4	8.88	0.38	13.67	13.2	8.08	771	No
SP-W-IN	Influent	2026-05-29 12:45	21	8.35	0.36	73.65	57.9	7.98	744	No
SP-W-IN	Influent	2026-05-30 14:30	21.1	9.34	0.37	23.7	20.7	8.03	757	No
2700GPM-IN	Influent	2026-05-24 11:03	20.6	9.08	0.35	8.23	9.1	8.20	724	No
2700GPM-IN	Influent	2026-05-25 12:17	18.7	9.16	0.32	11.42	11.5	8.20	663	No
2700GPM-IN	Influent	2026-05-26 9:30	16.3	9.63	0.32	19.79	17.8	7.99	645	No
2700GPM-IN	Influent	2026-05-27 14:13	20.4	9.78	0.31	24.37	21.2	8.43	641	No
2700GPM-IN	Influent	2026-05-29 14:25	21	8.88	0.40	26.86	23.0	7.95	813	No
2700GPM-IN	Influent	2026-05-30 14:19	20.1	9.3	0.37	24.11	21.0	8.18	756	No
<b>Effluent<sup>5</sup></b>										
-	-	-	-	-	-	-	-	-	-	-

**Notes:**

West catchment influents for May 24 – 30 were not discharged to Howe Sound. Results above screening values are only highlighted for comparative purposes.

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

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

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

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

<sup>2</sup> The WQG was not evaluated for parameters with discharge limits.

<sup>3</sup> TSS concentration is estimated from field turbidity measurements using a site-specific relationship  $TSS = 0.7458 * [turbidity \text{ as NTU}] + 3$ .

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

<sup>5</sup> As described in Section 1.1, when there is surplus water, West Sedimentation Pond clarified effluent from the individual 2700GPM trains is directed to SP-W-OUT for discharge. 2700GPM clarified effluent was not discharged to Howe Sound at the authorized discharge location (SP-W-OUT) during the monitoring period (May 24 – 30); therefore, daily field parameters were not collected from station SP-W-OUT on May 24 – 30.

<sup>6</sup> The PE-111578 discharge limit for TSS is 25 mg/L under dry conditions and 75 mg/L for each day of Wet Conditions and for one day following the end of Wet Conditions.

**Table C-4:  
West Catchment Daily Discharge Volumes for the Monitoring Period (May 24 – 30).**

	West Sedimentation Pond Effluent	West TSS Settling System (2700GPM) Clarified Effluent (Station 2700GPM-OUT) <sup>3</sup>	Water Reclaimed for Construction Purposes (Station 2700GPM-OUT)	West WWTP Treated Effluent <sup>1</sup> (Station WWTP-W-OUT)	Discharge to Howe Sound (Station SP-W-OUT)
Unit	m <sup>3</sup>	m <sup>3</sup>	m <sup>3</sup>	m <sup>3</sup>	m <sup>3</sup>
<b>PE-111578 Discharge Limit</b>	-	-	-	120	- <sup>2</sup>
<b>Date</b>					
2026-05-24	0	873	197	0	0
2026-05-25	0	1,136	155	0	0
2026-05-26	0	811	52	0	0
2026-05-27	0	1,170	211	0	0
2026-05-28	0	597	53	0	0
2026-05-29	0	749	0	0	0
2026-05-30	0	1,437	159	0	0

**Notes:**

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

<sup>1</sup> The West WWTP is not being operated therefore discharges are not expected from this facility.

<sup>2</sup> 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<sup>3</sup>/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.

<sup>3</sup> Clarified effluent from the 2700GPM TSS settling system is recirculated to the West Sedimentation Pond, discharged to Howe Sound or reclaimed for construction purposes based on operational considerations. Daily discharge volumes from station 2700GPM-OUT are a sum of all active treatment trains

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

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

Parameter	Unit	Lowest Applicable Guideline <sup>1,2</sup>		Station OUT-02 Non-contact Water Diversion Ditch Outlet OUT-02 VA26B2397-001 2026-05-16 12:28
		Long Term	Short Term	
<b>General Parameters</b>				
pH - Field	pH units	6.5 - 9.0	-	6.63
Specific Conductivity - Field	µS/cm	-	-	14.1
Temperature - Field	°C	-	-	10.6
Salinity - Field	ppt	-	-	0.01
Turbidity - Field	NTU	-	-	1.6
TSS	mg/L	-	-	<3.0
Dissolved Oxygen - Field	mg/L	>=8	>=5	11.11
Total Hardness	mg/L	-	-	4.49
Dissolved Hardness	mg/L	-	-	4.43
<b>Anions and Nutrients</b>				
Sulphate <sup>2</sup>	mg/L	128	-	1.39
Chloride	mg/L	120	600	<0.50
Fluoride <sup>2</sup>	mg/L	0.12	0.400	<0.020
Ammonia (N-NH <sub>3</sub> ) <sup>2</sup>	mg/L	1.84	24.7	<0.0050
Nitrite (N-NO <sub>2</sub> ) <sup>2</sup>	mg/L	0.2	0.6	<0.0010
Nitrate (N-NO <sub>3</sub> )	mg/L	3	32.8	0.143
Total Organic Carbon (TOC)	mg/L	-	-	3.55
Total Inorganic Carbon (DOC)	mg/L	-	-	3.68
<b>Total Metals</b>				
Aluminum, total (T-Al) <sup>2</sup>	mg/L	0.0508	-	<b><u>0.117</u></b>
Antimony, total (T-Sb)	mg/L	0.074	-	<0.00010
Arsenic, total (T-As)	mg/L	0.005	-	<0.00010
Barium, total (T-Ba)	mg/L	1	-	0.00289
Beryllium, total (T-Be)	mg/L	0.00013	-	<0.000020
Boron, total (T-B)	mg/L	1.2	29	<0.010
Cadmium, total (T-Cd) <sup>2</sup>	mg/L	0.0000364	0.000106	0.0000054
Chromium, total (T-Cr) <sup>3</sup>	mg/L	0.0025	-	<0.00050
Cobalt, total (T-Co) <sup>2</sup>	mg/L	0.000389	-	<0.00010
Copper, total (T-Cu)	mg/L	-	-	<0.00050
Iron, total (T-Fe)	mg/L	0.185	1	0.019
Lead, total (T-Pb)	mg/L	-	-	<0.000050
Manganese, total (T-Mn) <sup>2</sup>	mg/L	-	-	0.00137
Molybdenum, total (T-Mo)	mg/L	0.073	46	0.00053
Nickel, total (T-Ni) <sup>2</sup>	mg/L	0.0250	-	<0.00050
Selenium, total (T-Se)	mg/L	0.001	-	<0.000050
Silver, total (T-Ag)	mg/L	0.00012	-	<0.000010
Thallium, total (T-Tl)	mg/L	0.0008	-	<0.000010
Uranium, total (T-U)	mg/L	0.0085	0.033	0.000101
Vanadium, total (T-V)	mg/L	0.12	-	<0.00050
Zinc, total (T-Zn)	mg/L	-	-	<0.0030
Hexavalent Chromium, total	mg/L	0.0025	-	-
<b>Dissolved Metals</b>				
Cadmium, dissolved (D-Cd) <sup>2</sup>	mg/L	0.0000215	0.0000380	<0.0000050
Copper, dissolved (D-Cu) <sup>2</sup>	mg/L	0.000200	0.00119	<b><u>0.00054</u></b>
Iron, dissolved (D-Fe)	mg/L	-	-	0.012
Lead, dissolved (D-Pb) <sup>2</sup>	mg/L	0.00210	-	<0.000050
Manganese, dissolved (D-Mn) <sup>2</sup>	mg/L	0.165	1.97	0.00097
Nickel, dissolved (D-Ni) <sup>2</sup>	mg/L	0.000800	0.0127	<0.00050
Strontium, dissolved (D-Sr)	mg/L	2.5	-	0.00652
Vanadium, dissolved (D-V)	mg/L	-	-	<0.00050
Zinc, dissolved (D-Zn) <sup>2</sup>	mg/L	0.00763	0.0103	0.0011
<b>Polycyclic Aromatic Hydrocarbons (PAHs)</b>				
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	-	-
<b>Volatile Organic Compounds (VOCs)</b>				
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	0.0013	-	-
1,2-Dichlorobenzene	mg/L	0.0007	-	-

**Notes:**

Non-detect results are screened using the detection limit value.

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

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

<sup>1</sup> The lowest applicable guidelines from approved or working BC WQGs, Canadian (CCME) WQGs and Federal WQGs.<sup>2</sup> 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.<sup>3</sup> The approved BC WQG for hexavalent chromium [Cr(VI)] is 0.0025 mg/L and 0.0089 mg/L for trivalent chromium [Cr(III)]. The more conservative criteria for Cr(VI) is applied to total chromium results.

The lowest applicable guidelines are shown in the table; however, water quality data was screened to all applicable guidelines.

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

Parameter					Total Methylmercury	Total Mercury
Unit					µg/L	µg/L
Lowest Applicable Guideline <sup>1</sup>					0.0001 <sup>2</sup>	0.0051 <sup>3,4</sup>
Station	Description	Sample ID	Lab ID	Sampling Date		
OUT-02	Non-Contact Water Diversion Ditch Outlet	OUT-02	VA26B2397-001	2026-05-16	0.000043	0.00221

**Notes:**

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

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

<sup>2</sup> 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.

<sup>3</sup> CCME guideline for total mercury = 0.026 µg/L.

<sup>4</sup> When MeHg ≤ 0.5% of total Hg, BC WQG = 0.02 µg/L. When MeHg > 0.5% of total Hg, BC WQG = 0.0001/(MeHg/Total Hg). Detection limit values are used to calculate the WQG for result reported as not detected.

Non-detect results are screened using the detection limit value.

***Appendix E:  
Freshwater Receiving Environment Monitoring  
Results***

**Table E-1:  
Freshwater Dioxin and Furan Toxicity Equivalency Quantity (TEQ) Results Received at the Time of Reporting.**

Parameter					Lower Bound PCDD/F TEQ	Upper Bound PCDD/F TEQ
Unit					pg/L	pg/L
Station	Water Type	Sample ID	Lab ID	Sampling Date		
SW-02	Lower Freshwater Reach of Mill Creek (upstream of the third bridge)	SW-02	VA26B0152-001	2026-04-27	0.0823	2.38
SW-07	Upstream Mill Creek (at the diversion inlet)	SW-07	VA26B0152-003	2026-04-27	0	2.36
SW-01	Lower Reach of Woodfibre Creek (near the mouth)	SW-01	VA26B0251-001	2026-04-28	0	1.62
SW-04	Lower Reach of East Creek (near the outlet to the outfall culvert)	SW-04	VA26B0251-002	2026-04-28	0	2.13

**Notes:**

PCDD = polychlorinated dibenzodioxins (dioxins)

PCDF = polychlorinated dibenzofurans (furans)

TEQ = toxic equivalency

Lower bound PCDD/F TEQ is the sum of the toxic equivalency results for the individual PCDD/F parameters. Non-detectable parameters are assigned a value of zero (0).

Upper bound PCDD/F TEQ is the sum of the toxic equivalency results for the individual PCDD/F parameters. Non-detectable parameters are assigned the value of the detection limit.

***Appendix F:  
Estuarine Water Receiving Environment Results***

**Table F-1:  
Estuarine Water Dioxin and Furan Toxicity Equivalency Quantity (TEQ) Results Received at the Time of Reporting.**

Parameter					Lower Bound PCDD/F TEQ	Upper Bound PCDD/F TEQ
Unit					pg/L	pg/L
Station	Water Type	Sample ID	Lab ID	Sampling Date		
SW-03	Mill Creek Estuary	SW-03	VA26B0152-002	2026-04-27	0	1.84

**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.