

July 27, 2023

Ms. Lavinia Zanini  
Land Remediation Section  
Ministry of Environment and Climate Change Strategy (ENV)  
Lower Mainland Region  
10470, 152<sup>nd</sup> Street  
Surrey, BC, V3R 0Y3

**Semi-annual Status Report for January through June 2023**  
**BC Site Number 6726**

Dear Ms. Zanini:

cc: City of Burnaby – Saleh Haidar  
CP Rail – Jordan Wakefield  
Environment Canada – Chris Raymond  
Fraser Health – Arnold Fok  
INAC (Indigenous and Northern Affairs Canada) – Christopher McDonald  
Port of Vancouver – Kate Schendel, Taisha Mitchell  
Squamish Nation – Rachel Munger  
Tsleil-Waututh Nation – Brittany John

This semi-annual status report is in response to the requirement set out by the Ministry of the Environment and Climate Change Strategy (ENV) to keep ENV and pertinent parties updated on information regarding Parkland's on-going inspections, investigations, and remediation of the area of concern. It covers activities in the months of January through June 2023. ENV has approved a reduction of the frequency of these updates to an annual basis, therefore after this update, annual updates will be provided typically in July of each year; a January 2024 update will not be provided.

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Parkland continues the Burnaby Refinery's longstanding commitment to ensuring that we protect our local environment, and we mitigate and contain potential impacts relating to the former seepage from Area 2 of the refinery, which was first identified in April 2010.

Parkland is also committed to community engagement, therefore these semi-annual updates, including attachments, are provided on the Burnaby Refinery Community Advisory Panel (CAP) website - <https://www.burnabyrefinery.ca/safety-environment-reliability/remediation-monitoring-programs>.

### FORESHORE

The Foreshore Passive Treatment System (FPTS) construction was completed in October 2017 and has been in operation for over five years. As part of the FPTS, new flow-through treatment cells were installed in both the Eastern and Western Seep areas. The FPTS Construction report is posted on the Burnaby Refinery website.

Due to the low concentrations and stability of contaminants of concern measured at the FPTS, porewater sampling on the Foreshore was reduced to annual starting in 2020 and will be reduced to every two years after 2023; after 2025 the sampling frequency will be reduced to every five years. Parkland will continue observation and maintenance inspections of the FPTS to ensure that it remains effective on a semi-annual basis. An updated FPTS Monitoring, and Maintenance Plan (FPTS MMP) approved by ENV is now posted on the CAP website and attached to this report as part of this update. Inspections of the FPTS during this reporting period were completed on January 27 and March 24, 2023. The 2023 Foreshore Monitoring report is now posted on the CAP website as part of this update. The most recent annual monitoring reports for the work performed on the foreshore are available on the Burnaby Refinery website. Other reports are available on request.

### RAILROAD

Extraction of groundwater from the interception trench on the CPR right of way continued until April 18, 2023, when the system was placed on standby after having been in operation since January 2011. The interception trench was designed as a temporary measure with a design life of two years. Field monitoring data of the CPR ROW interception trench, nearby groundwater monitoring wells and the upgradient Perimeter Extraction System (PES) demonstrated that the on-going operation of the interception trench was no longer required. The operational status of the interception trench was changed from active to standby by removing the two pumps on April 18, 2023. Parkland and AECOM are not aware of any regulatory commitments, requirements, or obligations with regards to the interception trench. Monitoring of wells on the CPR ROW continues on a semi-annual basis.

### REFINERY

In general, the Perimeter Extraction System (PES) continued to operate effectively as designed and is monitored regularly. The most recent reports on performance of the PES are presented on the Burnaby Refinery website. These reports also include a summary of the refinery Perimeter Monitoring Program (PMP) of which the PES is a significant part. The 2022 report for the PMP and PES is now posted on the CAP website as part of this update. Reports on the PES for previous years (to 2010) are available on request.

I trust this provides you with our progress to date and demonstrates our on-going commitment to the proactive management of this situation. Please let either Vicki Bowman (Refinery Environmental Manager, 604-257-5052) or me know if you have any questions.

Thank you.

*Chris Boys, M.Sc., P.Geo.*  
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Burnaby Refinery  
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