



Powering Journeys
Energizing Communities



PARKLAND BURNABY REFINERY

Community Advisory Panel

September 21, 2022

We would like to begin by respectfully acknowledging that the Parkland Burnaby Refinery resides on the unceded traditional territory of the Musqueam, Squamish and Tsleil-Waututh Nations.

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Gearing up for Lower Carbon



Our upcoming Community Advisory Panel (CAP) meeting will be a timely opportunity to review and discuss recent major developments at the Refinery; and to look ahead to what will be a very busy fall and winter, as we pursue a potential expansion of co-processing and construction of a renewable diesel plant at our facility. Having regrettably had to miss the June CAP meeting, I particularly look forward to re-connecting with all of you in person on September 21.

Laying the Groundwork for Expanded Low-Carbon Fuel Production

Parkland staff appreciated the initial dialogue with CAP members in June with respect to the then-newly announced plan to significantly expand and diversify our low-carbon fuel production (within the existing Refinery footprint). A tremendous amount of work is underway and ahead to lay the groundwork for a final investment decision, likely in late 2023.

Internally, we are implementing a significant re-organization and resource ramp-up, to ensure we are equipped to pursue the expansion, while fully maintaining our usual operational performance standards. I am also pleased to note that we have secured and are now operating under the terms of a renewed air permit and amended 10-year air permit issued by Metro Vancouver. We have also initiated discussions with the regulator relating to the further amendment that will be needed to accommodate expanded low-carbon fuel production, while ensuring emissions remain within new and more stringent limits.

Parkland Reports on Sustainability Progress Corporately

Transportation decarbonization efforts at the Burnaby Refinery are a centerpiece of Parkland's corporate commitment to sustainability, although our enterprise-wide strategy is of course multi-faceted. If you haven't already, I encourage you to review Parkland's [second corporate sustainability report](#) (also summarized in our most recent [Community Connection](#)). We welcome any questions or input at our upcoming meeting.

Parkland Supports Signature Community Events

We've been pleased to support several of the signature events that are such an important part of the fabric of life-in-the-summer here in Burnaby. This included significant sponsorships of Hats Off Day along Hastings Street, local Canada Day Celebrations, and the Burnaby Blues + Roots Festival at Deer Lake Park. You'll find more details on the broader scope of our community partnerships and involvement elsewhere in this report.

In closing, I'd like to thank you for your recent participation in both a broad community perception survey and in a separate survey specific to the CAP members. These feedback mechanisms are instrumental to our efforts to continuously work towards being a better neighbour.

Alex Coles
Vice President & General Manager, Parkland Burnaby Refinery

Health, Safety and Environment

The Burnaby Refinery works to continually safeguard the health and safety of all of its employees, ensuring risks are carefully managed and workplace injuries minimized. That commitment to health and well-being extends beyond our fences, most notably through our stringent management of emissions and all other aspects of our operations' potential environment impacts.

Recordable Injuries since the last CAP meeting (June 15, 2022) include:

July 14, 2022	Soft tissue injury to knee requiring modified work duties
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Level 1 advisories since the last CAP meeting (June 15, 2022) include:

July 7, 2022	Minor maintenance on Splitter Unit
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Environmental incidents since the last CAP meeting (June 15, 2022) include:

July 7, 2022	Exceedance of Total Suspended Solids from our Waste Water Treatment Plant.
July 26, 2022	Air Permit exceedance from the Sulphur Recovery Unit.
July 31, 2022	Air Permit exceedance from the Sulphur Recovery Unit.
August 19, 2022	Air permit exceedance from the Fluidized Catalytic Cracker Unit.

Low-Carbon Leadership

Our operations and business environment are continually evolving, and we typically have one or more strategic projects underway at any given time. These often involve capital investments and infrastructure development, increasingly with a focus on the growing scope of our low-carbon production. We strive for consultative approaches and transparency whenever these projects impact the community.

Renewable Diesel and Hydrogen Facility (RD/H2)

- This past May 2022, Parkland announced the RD and Hydrogen Facility that - in combination with our co-processing - will reduce greenhouse gas emissions by two megatonnes per year, which is the equivalent of removing about 700,000 or one-quarter of all British Columbia's passenger vehicles off the road.
- The renewable diesel plant will be built within the existing site.
- The refinery recently hired Graham Lawton, Vice-President of Projects who will lead the RD/H2 project.
- We are in preliminary project planning and continuing with hiring key positions.
- As we move closer to a final investment decision, we will ensure that more details on the scope and construction are shared with the community.

Tail Gas Treatment Unit (TGTU)

- The TGTU reduces sulfur dioxide emissions at the refinery.
- The TGTU has been accepted by Metro Vancouver and is part of the refinery's updated air permit.
- We are working on the project design and ensuring that all permitting requirements are met.
- Estimated target completion is mid-2025.

Area 1 Tanks

- As part of our infrastructure improvements, we are refurbishing a section of the Area1 - Blending and Shipping area. We have already removed a number of older, smaller tanks and are planning to remove more small tanks to make room for 4 new tanks within the already established tankfarm.
- Two of these tanks are for storage of bio-feeds that will be fed through the new pipelines to the refinery process units.
- Two of these tanks will be used for storing renewable fuels. As we work to decrease the carbon intensity of the fuels we sell, we need to blend more renewable fuels, and we need a place to store these fuels before we blend them.
- As this is in the early planning stage, we will work with the City and regulators to ensure meet the necessary approvals. Like any construction, we recognize the impact it may have on the community and are taking this into consideration in our planning.
- We are aiming to process PPAs with the City in the fall of 2022 and start construction in 2023.

Park Pipeline

- Work is underway on adding two additional bio-feed pipelines between our operating areas.
- These two pipes will be added to existing pipelines that currently run through Confederation Park. The current pipelines transport traditional hydrocarbons and bio-feeds, and the new additions will be solely used for bio-feed.
- Work is estimated to be completed by end of 2022.
- We are committed to ensuring that the park is restored to its previous state.

Air and Water Discharge Permits

Metro Vancouver is the regulatory authority that approves and monitors compliance with our air emissions and waste water discharge permit, which are part of the most important sources of regulatory standards and requirements with which we align Refinery operations. We are in continual dialogue with Metro Vancouver on permit compliance.

See attached document from Metro Vancouver.

Odour Management Recap

Parkland's has a comprehensive Odour Management Plan (OMP) as a requirement of our Metro Vancouver air permit. The goal of the OMP is to provide Parkland with an effective and continuous strategy to minimize the impacts of odours from refinery operations on the local community and is reviewed annually.

The Parkland OMP:

- Defines the elements of effective odour management,
- Identifies potential sources, conditions, and materials that can give rise to odour at the refinery,
- Summarizes the programs and controls currently in-place to minimize odour generation,
- Updates the odour complaint response, management, and documentation processes,
- Provides procedures to conduct localized air monitoring during an episodic odour events, and,
- Outlines a framework to implement, and track to closure, corrective actions to mitigate odour from Parkland's facilities and prevent their recurrence.

Most often, Parkland receives notification of a complaint via complainants reporting to Metro Vancouver, who then relay the information to us. This quickly initiates a systematic investigation process both on and off site, primarily by our on shift operations supervisor. This includes:

Parkland staff physically visiting the area of complaint to assess if the reported odour can be detected. This allows confirmation of the type of odour, and discussion with any public members in the area, helping to track down potential sources.

The Shift Supervisor engages operational staff at the tank farm (Area 1) and the refinery (Area 2) to assess if there are any operating conditions that could be causing an odour.

Meteorological conditions are assessed to help determine the potential originating area of the odour.

If an on site source is identified, immediate steps are taken to mitigate it.

Findings are reported back to Metro Vancouver and to refinery staff, including management. The details are recorded in a database and additional follow up is conducted by Environmental Staff as required.

As part of an effective OMP, Parkland performs a monthly and annual review of complaints received from the public and from Metro Vancouver, both of which are shared with Metro Vancouver. These reviews assist in the identification of trends and assist in determining what areas the facility needs to focus on to further improve odour performance. In 2019, an upward trend in complaints relative to historical performance was noted. In the years since, a focus group was formed at the refinery to investigate potential causes and many mitigating

actions have been taken to reverse that trend. Please refer to previous CAP meeting reports for additional details on these actions:

(https://assets.ctfassets.net/tatgxebmkmwo/100WhNgZ6izb8FLjwHki1y/18f1e692930265be96c6c272e3e8945f/CAP_Presentation_December_8_2021.pdf)

Residents are encouraged to report any noted odours to Metro Vancouver's air quality line at 604-436-6777 or to our community contact line at communitybc@parkland.ca or 604 257-4040.

Air Permit Update

As noted in Alex's update, Parkland is pleased to report that our air permit with Metro Vancouver was renewed in late July, taking effect on August 1st, 2022 for a 10 year period. This amendment comes with significant commitments for capital investments and ongoing studies for continuous improvement. Some notable revisions include:

- Reduction of permitted limits for Sulphur Dioxide (45%), Nitrogen Oxides (18%) and Particulate Matter (23%). This includes commissioning of a Tail Gas Treating Unit in the Sulphur Recovery unit, reducing Sulphur Dioxide emissions from that source by 90%, and flue gas recirculation on a boiler to reduce NOx emissions, both by 2025.
- New facility wide permit limits on methane, Volatile Organic Compounds and throughput limits on tank and loading operations.
- Additional stack test monitoring provisions
- Augmentation of ambient air quality monitoring by addition of monitoring at existing stations and a new station to be installed on the North Shore
- Requirements for further emission reduction studies for flaring, Volatile Organic Compounds, Methane and Nitrogen Oxides, including updated dispersion modelling and Human Health Risk Assessment studies.

Parkland remains committed to meeting the high-performance expectations of our air permit. For additional background information on the renewal, please visit: <https://www.burnabyrefinery.ca/community/refinery-projects/human-health-risk-assessment>

To view a copy of our renewed air permit, please visit: [http://www.metrovancouver.org/services/Permits-regulations-enforcement/air-quality/apply-permit/AirQualityPermitsSigned/1217%20-%20Parkland%20Refining%20\(B.C.\)%20Ltd.%20-%20AQ%20Permit%20-%20Issued%20July%2028%202022.pdf](http://www.metrovancouver.org/services/Permits-regulations-enforcement/air-quality/apply-permit/AirQualityPermitsSigned/1217%20-%20Parkland%20Refining%20(B.C.)%20Ltd.%20-%20AQ%20Permit%20-%20Issued%20July%2028%202022.pdf)

The Community's Point of Contact

“Community” is a core Parkland value, and we strive to be a responsible neighbour and to contribute positively to community wellbeing and quality of life – particularly recognizing our location in the heart of a major metropolitan area. Our community relations team is engaged in any initiative at the Refinery that may have external impacts. Some of its activities are also touched on in preceding sections of this report.

Taking the Pulse of Community Perceptions

- Over the summer we commissioned a market research company to conduct a study encompassing awareness of Parkland and the Burnaby Refinery, perceptions of the company and the facility, and assessments of our engagement on key issues such as climate change.
- There were two key components to this research:
 - A brief survey was conducted in-person with a sample of local residents at various Burnaby community events; and
 - More in-depth conversations were conducted on a one-on-one basis with key stakeholders and influencers within organizations such as the City of Burnaby, as well as with CAP members.
- This survey provides an important baseline reading of community and stakeholder perceptions, and the results will be helpful in planning our community relations strategy and activities for 2023, and in allocating resources appropriately.
- The survey also sought input with respect to Parkland community investments, and the results will inform the refreshed, Burnaby-specific community investment strategy that we continue to build.

Checking in With CAP Members

- We also recently conducted a separate survey specifically of CAP members.
- This has provided further insights – from particularly well-situated respondents – with respect to both how well we are performing in our efforts to be a good neighbour, and improvement opportunities in areas such as frequency and format of communications.
- Full survey results will be provided to CAP members (See Appendix 1).
- We also intend to discuss with the CAP the possible formation of a working group to review the findings, and some of the qualitative input and means by which we may leverage it – in the contexts of both the operation of the CAP and our broader community relations program.

Community Investments

- Signature event sponsorships since the last CAP meeting have included:
 - Hats Off Day on Hastings Street
 - Burnaby Canada Day Celebrations
 - Blues + Roots Festival at Deer Lake Park

- The Refinery has a long history of supporting local organizations that strengthen the social and economic fabric in the community. To date in 2022, we have supported the following organizations:

- Rosser Elementary School
- Burnaby Neighbourhood House
- Volunteer Cancer Drivers Society
- Fraser River Discovery Organization
- Burnaby Lakers Lacrosse
- Burnaby Community Services
- BCIT
- City of Burnaby
- Burnaby Now
- Burnaby Hospice Society
- Burnaby Firefighters Charitable Society
- Junior Achievement of British Columbia
- Pacific Salmon Foundation
- St. Thomas More Collegiate High School
- Burnaby Hospital Foundation
- University of British Columbia – Forestry Faculty
- Heights Merchant Association
- Bloom Groups – Women’s Shelter
- Cobble Hill Fair
- College for the Retired
- Alpha High School
- Big Sisters
- Dixon Transition Society
- Threads of Life

Municipal and Stakeholder Relationship Building

- See attached Translink Presentation

Community Inquires, Questions and Concerns

From June 10, 2022, to September 15, 2022 received a total of 2 complaints and 3 inquiries from the community. The following is a breakdown of the topics:

Topic	Number of Inquires	
Traffic	2	A resident noticed a contractor using a residential street. A CAP member asked about the use of the Gamma parking lot.
Odour	2	A resident and a CAP member inquired about smells.
Noise	1	A resident was concerned about the noise caused by a motorcycle.

**Complaints in this context are those the Community Relations team receives directly. Odour and other complaints received by the shift supervisor are not reflected above but are addressed in the Metro Vancouver update.*

City of Burnaby

The City of Burnaby is our host municipality and home for a great many of our employees, while our Refinery in turn is an important component of the local business community and tax base. We are in regular dialogue with the City of Burnaby on operational considerations such as traffic that can impact neighbouring residents.

To be presented at CAP