

Air Permit Application Information Session

Date: Thursday, March 10, 2022

Time: 5:00 p.m. – 6:30 p.m.

Online: [Parkland Air Permit Application-Information Session](#)

Purpose of the public meeting: to provide members of the community an opportunity to learn more and ask questions about Parkland's Burnaby Refinery air permit renewal application. The existing permit expires in July 2022 and Parkland has applied to Metro Vancouver for a 10 year renewal.

Attendees:

Parkland: Rajvir Rao, Community Relations Manager, Jessica Bermudez, Community Relations Coordinator, Jason Seeley, Environmental Reporting Specialist, Alex Coles, VP & General Manager, Nick Middleton, Health, Safety & Environment Director, Vicki Bowman, Environmental Manager

WSP: Theresa Repaso-Subang, Senior Technical Lead & Team Lead – Toxicology & Risk Assessment, Francis Ries, Senior Engineer, Earth & Environment, Tyler Abel, Team Leader, Environmental Management, Vancouver Region Environment

Metro Vancouver: Maari Hirvi-Mayne, Senior Project Engineer, Environmental Regulation and Enforcement, Jason Mushtuk, Permitting Specialist, Environmental Regulation and Enforcement

City of Burnaby: Dipak Dattani, General Manager Corporate Services

Moderated by Andrea Manchon, VP Engagement at Argyle

21 participants attended the event

Agenda:

1. Welcome & Land Acknowledgement – Moderator
2. Parkland Overview – Parkland (Alex Coles)
3. Metro Vancouver Permit Application Process – Metro Vancouver (Maari Hirvi-Mayne)
4. Parkland's Air Permit Application Overview – Parkland (Vicki Bowman)
5. Human Health Risk Assessment Results – WSP (Francis Ries)
6. Next Steps – Parkland (Rajvir Rao)
7. Q&A – All

Meeting Notes

Welcome & Land Acknowledgement – Moderator

The moderator welcomed attendees to the public information session for Parkland's air permit application, provided a land acknowledgement and reviewed the meeting agenda. Instructions on how to participate using the virtual meeting platform (Microsoft Teams) was also provided.

Parkland Overview and Purpose of Air Permit – Parkland (Alex Coles)

Alex thanked participants in the meeting for joining and participating in the consultation phase of the air permit application process. An overview of Parkland's business operations in Canada and across North and Central America was provided.

- Parkland is the largest independent fuel marketing company in Canada with operations across 25 companies.
- Parkland manufactures and purchases refined products, transports and stores product in addition to servicing end users of the market through retail, wholesale and commercial sales. For example, Chevron and On the Run convenience stores are part of the Parkland family of brands.
- Parkland operates one refinery in the City of Burnaby. Alex spent a few minutes speaking about refinery operations that help keep BC's economy running and Parkland's commitment to being a leader in reducing greenhouse gas emissions intensity and transitioning to a lower carbon future. Parkland produces co-processed fuels that are available in the local market today and have approximately 1/8 carbon intensity of conventional fuels. Commercial-scale production of biofuels started in 2020 and continues today.
- Comment:
 - o I appreciate Parkland is making a commitment to reducing CO₂ emissions with co-processed fuel however I learned recently Parkland's total annual production of co-processed fuel is less than 1%. I recognize we need to start somewhere but respectfully request that future presentations present this data as part of total output.
- Response:
 - o Parkland appreciates neighbours have an interest in the Burnaby Refinery operations and level of impact on the community. Alex explained biofuel supply is limited and in order to remain competitive in the market some information about its co-processing is considered commercially sensitive. Parkland is a proud leader in this space and will continue co-processing with the intention to increase the volume as much as possible over the next five years.

Metro Vancouver Permit Application Process – Metro Vancouver (Maari Hirvi-Mayne)

Maari introduced herself and explained her role at Metro Vancouver as acting Air Quality Program Manager with the Environment Regulation and Enforcement Division – a division that regulates air quality, and some liquid and solid waste in the region. Maari provided a summary of the steps involved in the process highlighting what has occurred, where we are today, and what remains prior to Parkland receiving the air permit currently under review. Maari recognized Parkland for proactively hosting the public information session on their own initiative prior to a discretionary requirement by the District Director. Public notification window provides at least 30 days for the public to comment and will close on April 9, 2022, although comments can be submitted and considered any time prior to a decision. Metro Vancouver staff are conducting a technical review of the permit application in parallel to the public consultation period which includes looking at dispersion modeling results which support the application and considering public comments on the application and human health risk assessment.

From there, staff will prepare a draft permit in consultation with Parkland and make a recommendation for final approval by the District Director. Additional requirements may be included in the final permit.

With respect to timeline, Parkland's current permit expires on July 31, 2022 so a decision should be made prior to this. Maari pointed out comments and responses from interested parties will be considered by the District Director when making a decision. Written comments from the public can be submitted to Metro Vancouver for consideration in the formal permit review process a few different ways (by email, form on www.metrovancouver.org or by mail).

- Question:
 - o Does Metro Vancouver (MV) have staff in house with appropriate level of expertise to do an independent technical review or is it third party peer reviewed?
- Response:
 - o (Metro Vancouver) Metro Vancouver will not be bringing in a third party. Because Parkland is a major permit in the region, Metro Vancouver have technical staff well versed to review and make recommendations on this particular permit. For example, there are four engineers on staff, all with familiarity and one with work experience in the refinery business.
 - o (Parkland) There are a lot of different levels of expert review involved as part of Metro Vancouver's process. To clarify, there are multiple technical studies that Parkland had third parties undertake, with some of those additionally peer reviewed, as required by Metro Vancouver to support the permit application. More information will be provided in the next section.

Permit Application Overview – Parkland (Vicki Bowman)

Vicki introduced herself as the Environment Manager at Parkland. She has been at the Parkland Refinery for 15 years and has a background in chemical engineering. Her presentation provided some background on the work that has been undertaken by Parkland to support the air permit application and some of the technical studies included in the application.

- Consultation is currently underway with public and Indigenous groups, regulators, municipalities and health authorities and it is a priority to Parkland to understand questions or concerns stakeholders may have about the permit application. Feedback and Parkland's responses will be provided to Metro Vancouver to help inform the final decision on the permit.
- The permit application process timeline was reviewed. Discussions on this application began over 5 years ago. It is Parkland's goal to have a final air permit by end of July 2022 in advance of the current permit's expiry date.
- Operational changes at Parkland Refinery were explained as well as the new limitations and augmented air quality monitoring that will be introduced with the new permit to reduce emissions.
- Parkland is requesting a 10-year term limit for the air permit to allow for regulatory certainty and time to implement emissions reduction technologies. 10 years would allow enough time to conduct comprehensive assessment of future permit amendments and a subsequent multi-year process involving a wide range of stakeholders.
- Parkland must and will meet newly developed requirements in air quality regulations (all levels of government) irrespective of the air permit term limit. Parkland will meet any new regulations that come into effect during the next 10 years.

- E.g. fence line monitoring and augmenting existing leak detection and repair program to control fugitive emissions was recently implemented outside of air permit process
- Question:
 - In the 10-year term limit, is there a progress review timeline proposed or identified for Metro Vancouver to consider with respect to any improvements?
- Response:
 - (Metro Vancouver) It is essential to process that there is continuous improvement. At this stage we're reviewing the draft permit and end result has not been determined yet. Parkland has applied for 10 years – they may get it – the decision will be made once all information is available. Typically, we do have continuous improvement requirements or request for additional studies if warranted.

Human Health Risk Assessment Results – WSP (Francis Ries)

Following introductions, Francis walked meeting participants through a presentation summarizing the Human Health Risk Assessment (HHRA) process and results of the conducted by WSP on behalf of Parkland as part of the air permit application. See [WSP's Air Permit Information Session presentation](#) for additional detail.

- Question:
 - A meeting attendee requested clarification of the map displaying SO₂ dispersion. Is it true on the amended permit scenario there are areas, notably the trail, that will be subject to the potential health risk?
- Response:
 - (WSP) Correct; that particular scenario indicates two hours per year at a single location affected by elevated levels. Keep in mind this amended permit maximum scenario assumes all sources of SO₂ are emitted at their permitted maximum at the same time which is an unlikely scenario.
 - Overall, we think it is a conservative scenario. It is required that one of the scenarios represents all sources operating simultaneously.
- Question:
 - Why is it not possible for the amended permit to eliminate this scenario? For two hours per year what is the consequence?
- Response:
 - (WSP) When we look at additional reductions from amended permit maximum scenario to the amended permit normal scenario that would give an idea of the amount of emission reduction required to completely eliminate those exceedances.
 - There may be practical limitations on additional SO₂ reductions going beyond what is proposed in the amended permit maximum scenario.
 - (Parkland) Permit limits are set so that we have some operational flexibility, and are required to represent the maximum achievable emission from each source. The maximum scenario is where every single emission on site would be performing at max permitted level for SO₂ however realistically the refinery would never operate that way. The amended permit normal level is most reflective with where we would expect the refinery would be operating emissions sources at.
- Question:
 - What are our thoughts on adding NO₂ monitoring at the fence line? Also, I presume that assessment is being done with refinery operating at normal conditions. Do you have any

comments on historical you may have reviewed during a time when the refinery was not operating at normal conditions?

- Response:

- (WSP) It is important to consider a pollutant like NO₂ is emitted almost exclusively from combustion sources that release their emissions vertically well above ground level. Fence line monitoring is not going to be at the location where we expect to see maximum impacts from such sources. The current monitoring locations (e.g. Capitol Hill, Kensington Park and McGill) are all located in positions where we would more expect elevated levels with respect to fence line itself.
- The largest contributions that were predicted for NO₂ were from background sources other than the Parkland refinery. As a result, monitoring for impacts on fence line is likely not warranted by the outcome of this study. The monitoring locations we have right now are situated between the refinery and residential locations of concern and Parkland is adding an additional monitoring location on the north shore.
- Regarding abnormal refinery operations, the ambient monitoring scenario 2017-19 incorporates all monitoring data available from Metro Vancouver irrespective of whether refinery operations were shut down, operating normally or having a short-term abnormal event (e.g. flaring). There isn't a dramatic difference in results in the number of hours per year we expect elevated levels between that and current permit maximum scenario.

- Question:

- Is the study WSP conducted in the last year a true reading under normal conditions especially since we have seen a slow down in fuel production at Parkland with the results of the pandemic?

- Response:

- Great question. One of the things we looked to when developing the time range for the study, specifically the air quality measurement data, was consideration that the last two years have been abnormal in many ways. Not just refinery but regional air quality as a whole.
- The years used for scenario 1 (ambient monitoring 2017-19) were pre-pandemic, and that was the most recent period of data available from Metro Vancouver at the time we started out study. For Scenarios 2-4 (Current Permit Maximum, Amended Permit Maximum, Amended Permit Norma), in order to establish our background or contribution of other emission sources, we made use of pre-pandemic data (from 2016-18).
- We've seen slow improvement as a general trend over time in air quality in the Metro Vancouver area. By using pre pandemic years for both Scenario 1 and Scenarios 2-4 background, we're being conservative in incorporating times refinery was operating at its designed rates and also incorporating peridos where we won't see pandemic related reductions in overall regional ambient air quality levels.

Next steps – Rajvir Rao

Rajvir, Manager of Community Relations at Parkland, reiterated Parkland's commitment to engaging with the community, especially neighbours living near the refinery, throughout the permit process and beyond related to Parkland's ongoing operations. Additional information, including this presentation, will be available to review on the website and shared with the Community Advisory Panel for additional distribution. Engagement is ongoing; the team will respond to all questions and continue to share information to keep neighbours and community members informed.

Q&A

- Comment:
 - I understand Parkland's business interests in a ten-year term limit. The flip side is that the world has changed in the past few years when it comes to expectations around emissions reductions. For example, in 2019 the City of Burnaby declared a Climate Emergency and announced aggressive emission reductions. For that reason, standards are changing quickly and speaking as a Capitol Hill resident I have difficulty supporting such a lengthy term-limit.
- Response:
 - Attendee was encouraged to submit their comment in writing to Metro Vancouver (parklandcomments@metrovancover.org)
- Question:
 - Once a permit has been approved, are the penalties for exceedances specific to the permit application, or are they stated in some kind of statute?
- Response:
 - Metro Vancouver is authorized under the BC Environment Management Act to issue permits. If there are exceedances of permit limits, Metro Vancouver could seek penalties as stated in air quality management Bylaw 1082.
- Question:
 - What are the penalties?
- Response:
 - Maximum penalty is \$1,000,000/day.