

Wednesday, March 30, 2022

6:00 PM to 7:30 PM

In-Person at SOLO / Teams Meeting Link Link: [CAP\\_Q1 Meeting](#)

**Facilitator:** Andrea Manchon, Argyle

**Note taker:** Christie Libby, Argyle

Attendees			
<b>Parkland</b>	Alex Coles	<b>CAP</b>	Amy Smith (virtual)
	Vicki Bowman (virtual)		Aswinee Rath
	Kate Groves		Brian Clive
	Nick Middleton		Davis Vaitkunas
	Rajvir Rao		Judith Roche
	Peter Turner		Kathy Mezei
	Jessica Bermudez		Michele Joel
<b>WSP</b>	Francis Ries		Tony Bosello
<b>Guest Speaker/Presenter</b>	Gord Locke		Dominic Flanagan (potential new CAP member)
<b>Metro Vancouver</b>	Jason Mushtuk (virtual)		Enda Brophy (potential new CAP member)
	Darrell Wakelin (virtual)	<b>City of Burnaby</b>	Erica Lay
<b>Regrets</b>	Stanis Smith		
	Dan Wood		

Regrets: Stanis Smith and Dan Wood

1	<p>Welcome and Introductions</p> <p>A.Manchon (facilitator) welcomed attendees and gave a brief land acknowledgement before reviewing the agenda for the meeting. A. Manchon explained the meeting approach will be slightly different from previous CAP meetings. The meeting is an opportunity for the Parkland team to share highlights from the materials that were shared in advance as well as an opportunity for discussion and questions from CAP members. There will be one presentation delivered by a guest speaker, Gord, a discussion format throughout the meeting is welcomed.</p> <p>A.Manchon introduced two potential new CAP members: Dominic Flanagan and Enda Brophy. Each provided a brief summary of their background and interest in joining CAP.</p> <ul style="list-style-type: none"> <li>• Dominic has a background in housing and health, moved into the Heights neighbourhood approximately 19 years ago and has an</li> </ul>	Andrea Manchon
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	<p>interest in joining CAP to know more about what goes on at the refinery.</p> <ul style="list-style-type: none"> <li>• Enda teaches at SFU, has lived in the neighbourhood for 6 years and has an interest in knowing more about Parkland's operations in the neighbourhood.</li> </ul> <p>N.Middleton (Parkland) provided instructions on how to safely evacuate from the room in the event of an emergency and described where the washrooms are located.</p> <p>A.Manchon mentioned there were two outstanding items from the previous meeting held in December with respect to tree removal, traffic throughput. The follow up responses were provided in the meeting package in addition to an update from the Emergency Notification Committee.</p> <p>R.Rao (Parkland) added Parkland has 699 parking spots for contractors and employees and confirmed there are enough parking spots for everyone and no residential street parking required.</p> <p>There were no questions.</p>	
2	<b>General Manager Update</b>	
	<p>A.Coles (Parkland) welcomed everyone and thanked them for participating acknowledging it is great to see so many and get back to meeting in person.</p> <p>A.Coles referenced the refinery has had a strong history of contributing to the community and looks forward to community events returning soon (e.g. Hats Off Day) . He also mentioned the incredible efforts made by Parkland staff during the November flooding events to enable emergency response efforts to continue to support communities and welcomed Erica Lay from the City of Burnaby attending her first CAP meeting tonight.</p> <p>There were no questions.</p>	Alex Coles
3	<b>Refinery Updates</b>	
3a	<p><b>Health</b></p> <p>Parkland continues to do COVID screens and are seeing low transmission rates. Will be welcoming workers back to office soon (April) and have removed mask mandate. Staff are maintaining daily health checks and maintaining physical distancing where possible.</p> <p>There were no questions.</p>	Kate Grove
	<p><b>Safety</b></p> <p>There was a minor injury in March (sprained ankle) requiring restricted duties for limited time.</p> <p>There were no questions.</p>	Kate Groves
	<b>Environment</b>	Kate Groves

There were 3 minor reportable environmental incidents last quarter. None affected the public.

- When refinery was re-started in mid-December there was a small release of LPG to atmosphere caused by a valve malfunction; reported to Ministry of Environment. Detected by operations and were able to make necessary repair immediately.
- Some refinery equipment was challenged during seasonably low temperatures in late Dec (-20); e.g. instrumentation on furnace and SRU stopped reading so safety system shut it down and restart caused an exceedance of SO<sup>2</sup> from SRU for 2 hours total.
- A small valve leak occurred and was immediately repaired; spill to air was reported to the Ministry of Environment

## Q&A

M.Joel inquired if this type of occurrence is preventable in the future and how other refineries are designed to operate in colder climates.

K.Groves explained the Burnaby refinery is not designed the same as colder climate refineries such as Edmonton. The Burnaby Refinery is designed to operate in temperatures of -25C and there are a number of steps operations take each year to prepare the refinery for cold weather. Each year staff are learning from previous issues to make necessary adjustments and improvements. It is taken very seriously.

A.Smith asked if the frequency of these exceedances (every couple weeks) during cold weather is typical compared to other similar sized refineries.

K.Groves noted there were two quite significant events in December: a total refinery restart and extreme cold weather. With windchill and sustained cold temperatures near -20 C over several days, some instruments were affected. K.Groves explained that since more robust safety units were upgraded in the 2020 turn around to enable safe, quick shut down in the event of an emergency and are investigating and taking action to address root causes. K. Groves offered to provide publicly available historical data on SRU exceedances if this is of interest.

**ACTION: Parkland to provide CAP members with publicly available historical data on SRU exceedances.**

D.Wakelin added quarterly reporting emission testing monitoring results are posted publicly on Metro Vancouver's website as a requirement of their permit. (<http://www.metrovancouver.org/services/Permits-regulations-enforcement/air-quality/reports/Pages/default.aspx>)

D.Vaitkunas asked how long the refinery was without input fuel following the flooding events and inquired if Parkland received fuel transported by rail.

A.Coles noted a couple of weeks and Parkland did not receive any product by rail. He explained the refinery operated for about a week with inventory then shut down when it became clear the Trans Mountain pipeline was not

	going to restart. Refinery took about two weeks to receive crude again once pipeline service was restarted.	
	<p><b>Projects</b></p> <p>P.Turner (Parkland) provided a brief update on refinery projects previously discussed with CAP in 2021.</p> <p>The park pipeline project planning continues in consultation with local government and non-government stakeholders. Some work has occurred, including removal of 59 trees, but the schedule has shifted slightly and will still take approximately 6 months to complete. Public access to the trail will be maintained. There is an agreement in place with City of Burnaby to replace trees and Parkland is committed to replanting significantly more trees than what have been removed. 59 have been replanted to date and Parkland is looking for opportunities to plant about 300 more on refinery property or in community. CAP member (M.Joel) indicated the community had ideas to share with Parkland for planting in Capitol Hill.</p> <p><b>ACTION: Rajvir will collect community ideas for replanting trees in and around the refinery.</b></p> <p>It has been determined the Area 2 Swing Tank project is not required at this time so it has been placed on hold. It is possible it will be required at some point in the future and Parkland will keep CAP informed if these plans are developed further.</p> <p>The 4 new tanks for bio feed and renewables in Area 1 are still in development; no change since last meeting. Parkland will take the same approach to tree removal/replanting for this project.</p> <p><b>Q&amp;A</b></p> <p>K.Mezei asked what can be done if neighbours notice recently planted trees are not doing well/dying (along the Trans Canada trail and inside Parkland's property)</p> <p>P.Turner noted there is a plan to maintain replanted trees (watering schedule etc) and any that die will be replaced. Community can let City of Burnaby know about trees on city property and Parkland with respect to trees on Parkland property.</p>	Peter Turner
4	<b>Air Permit Consultation</b>	
	V.Bowman (Parkland) provided a brief overview of air permit renewal application process underway with Metro Vancouver and consultation that has occurred to date. She also touched on the highlights provided in the meeting materials (e.g. air quality permit regulations and Human Health Risk studies). The existing permit expires in July 2022 and Parkland has applied to Metro Vancouver for a 10 year renewal. A public information session was held in March and Parkland continues to welcome comments from public and will respond. Comments will also be taken into consideration by Metro Vancouver. Parkland must and will meet newly developed requirements in air quality regulations (all levels of government)	Vicki Bowman

	<p>irrespective of the air permit term limit. Parkland will meet any new regulations that come into effect during the next 10 years.</p> <p>A.Smith asked for clarification on the terms ‘amended permit maximum’ and ‘amended permit normal’.</p> <p>V.Bowman explained permit process requires Parkland to apply for maximum achievable emission rate that could be theoretically achieved but in reality refinery never operates with every single source at permit maximum emission levels. Amended permit normal represents expected emissions levels during normal operating conditions.</p> <p>A.Smith provided feedback that she is aware there were members of public who did not know about the public information session in time due to post card invite arriving after the event. Is it worth mentioning she also provided positive feedback, giving ‘kudos’ to Parkland for hosting the information session?</p> <p>R.Rao thanked A.Smith for the feedback and apologized explaining there was a delay with Canada Post and delivery a week prior to the event did not happen as it was planned. We will ensure more delivery time is accounted for next time.</p> <p>Clarification was sought regarding a concern about the 10 year limit not being flexible enough to account for any changes over the next 10 years. Is it true if a regulator deems change must be made then Parkland must make that change?</p> <p>D.Wakelin spoke about Metro Vancouver’s process and ability within their legislation to open up a permit and make changes if deemed necessary to protect the environment. He explained there are conditions that restrict how they do this.</p> <p>V.Bowman added any new requirements that come about Parkland is required regardless of Metro Vancouver permit to comply. There are a few different regulatory layers with respect to air quality. E.g. Parkland was required to comply with federal Environment Canada program reduction on volatile organic compounds during the existing permit term.</p>	
<p><b>Human Health Risk Assessment</b></p> <p>F.Ries (WSP) walked meeting participants through the highlights of the presentation available in the meeting materials summarizing the process and results of the Human Health Risk Assessment (HHRA) conducted by WSP on behalf of Parkland as part of the air permit application. A brief overview of the four different study scenarios was provided leading up to discussion and questions.</p> <p><b>Q&amp;A</b></p>		<p>Francis Ries</p>

S.Smith submitted two questions in advance for response at the meeting:

- Question 1: Page 2 of the WSP HHRA states that two health impact assessments were performed, in 2002 and 2013 respectively. A HHRA predicts the likelihood of harmful health effects that may occur should people be exposed to contaminants. One has to assume that the science has progressed in the past 9 years and that the criteria/standards used for predicting health effects have become more stringent. Is the current HHRA based on current criteria/standards or on criteria/standards that are 9 (or more) years old?
- F.Ries pointed to table 5-13 on page 59 of the HHRA report in his response and explained the adoption date (date in which various values were published by authorities) range from 2003 – 2021 depending on pollutant and whether it is acute or chronic value. The HHRA looked to use the most current value that is also scientifically well supported.
- Question 2: Page 10 of the HHRA shows a map indicating the Sulphur Dioxide health risks for the amended permit, and there is still a zone that is identified as being at risk (even though that zone is significantly reduced from the current permit maximum). At the recent public meeting, someone, I believe it was a Parkland representative, stated that the potential for an exceedance beyond the requested new maximum to occur was practically zero. If that's the case, then why should any Sulphur Dioxide health risk be acceptable or any exceedance be permitted under the amended application?
- F.Ries reiterated what V.Bowman explained with respect to the difference between amended permit maximum and amended permit normal scenarios. Under the former we predict one hour per year at one location where we see exceedance of health threshold value for SO<sub>2</sub>; under the normal scenario that goes away. The latter is there because Metro Vancouver requires it however we believe a normal scenario is more representative of what is likely to happen. Feedback 'why not go further and reduce that' is good feedback for Metro Vancouver to hear.
- V.Bowman restated with the normal scenario we don't see any exceedances at all.

B.Clives asked what would happen if he is walking down the trail and something 'goes wrong' [with respect to emissions exceedance.]

F.Ries explained that the purpose of an HHRA is not to predict individual health outcomes, but to look to health science literature to see what would be expected at the population level. He indicated that the acute toxicology

reference value chosen for SO<sub>2</sub> is conservative, based on protecting someone with asthma from having an asthma attack. The science suggests someone who does not have asthma wouldn't likely see effects.

K.Mezei asked about the primary health effect symbols included on a chart in the HHRA presentation, one of which shows a drop of liquid, and another which shows two interlocking "C"s.

F.Ries explained that the drop symbol represents blood related effects for benzene and pointed her to Section of 5 of the HHRA report for the discussion of benzene health effects. The other symbol is the international symbol for carcinogens, as both benzene and 1,3-butadiene have been determined to be carcinogenic.

K.Mezei commented that a 2002 report stated the expectation is one more cancer patient or death than would be expected in the population normally and asked if these predictions can be made.

F.Ries explained that the 2022 HHRA uses the same approach to assessing cancer risks as the 2002 study and explained how the risk assessment model works with Health Canada setting threshold levels of incremental lifetime cancer risk (1 in 100,000). He also noted the study looked at public health data available for area around the Burnaby Refinery and saw cancer incidence levels below provincial averages (ie nothing stood out).

K.Mezei asked if it would be a good idea to monitor Capitol Hill for these two pollutants (benzene and 1,3-butadiene).

F.Ries noted Metro Vancouver, as the operator of those stations, makes the final decision on what pollutants will be monitored at each station. He also noted that the VOC data (including benzene and 1,3-butadiene) being collected by Parkland to meet Environment Canada's new requirement for fence line monitoring likely provides a more useful dataset for additional assessment of VOC-related health risks.

E.Brophy asked if the assessment takes into account exposure for workers on site at the refinery.

F.Ries noted that the scope of Metro Vancouver air permit only includes exposures to public outside of the refinery, and therefore occupation exposures were not part of the current study scope.

A.Coles noted there are different regulations that govern health and safety of workers inside the refinery.

N. Middleton noted personal protective equipment procedures are there to protect employees if needed.

A.Rath asked who reviews the HHRA and how their feedback is recorded.

F.Ries noted Fraser Health, Vancouver Coastal Health and First Nations Health Authority are all reviewing and will submit their feedback to Metro Vancouver. All feedback will be responded to and intent is to publicly share this feedback and WSP's responses.

D.Wakelin explained within Metro Vancouver process Metro Vancouver are not human health experts therefore they rely on partners in health regions

	<p>(Vancouver Coastal Health and Fraser Health). Feedback provided to Metro Vancouver is taken into consideration for the permit application and also shared with Parkland.</p> <p>A.Rath asked how the community can interpret the results.</p> <p>F.Ries noted results have been summarized for public interpretation in the summary report and presentation shared with the CAP. Any changes from what has been communicated to date arising from comments from Metro Vancouver the Health Authorities will be shared with CAP members again.</p> <p>V.Bowman noted Parkland in addition to Fraser Health and Vancouver Coastal Health, the HHRA work plan and study have been submitted to First Nations Health Authority for their review and comments. Parkland will be transparent with feedback and are always willing to answer more questions.</p> <p><b>ACTION: Keep CAP members and public informed on HHRA feedback from all 3 health authorities (Fraser Health, Vancouver Coastal Health and First Nations Health Authority) and summarize responses and any changes.</b></p> <p>D.Wakelin noted something the CAP may wish to consider is extending an invite to health authority to attend a future meeting if there is interest in this topic.</p>	
<b>5</b>	<b>Metro Vancouver</b>	
	<p><b>Air quality concerns and inquiries update</b></p> <p>J.Mushtuk (Metro Vancouver) gave an overview of their regulatory role permitting refinery activities. Monitoring results can be found on their website. Highlights from summary report provided in meeting materials included:</p> <ul style="list-style-type: none"> <li>- Working through 39 notifications from refinery (compared to 11 last year). Majority from late December. Some related to stale data.</li> <li>- 28 odour complaints (compared to 45 last year)</li> <li>- No issues so far this year with liquid waste discharge permit. This is an improvement since last year.</li> <li>- Saw elevated ambient SO2 for 2 hours in late December</li> </ul> <p>With respect to permit application, added they are conducting review and provided a reminder public comment period is open until April 9<sup>th</sup>. Any comments after April 9<sup>th</sup> will still be received up until permit decision.</p>	Jason Mushtuk
<b>6</b>	<b>City of Burnaby</b>	
	<p>Erica Lay introduced herself as Manager, Climate Action and Energy.</p> <p>There were no questions or comments.</p>	Erica Lay
<b>7</b>	<b>Community Relations</b>	
	<p>R.Rao (Parkland) thanked CAP members for attending kick off meeting in January and mentioned code of conduct and terms of reference for CAP</p>	Rajvir Rao



	<p>have been updated. Orientation packages are available for each CAP member to take home with them. CAP will start using basecamp app to communicate and organize meeting materials. Instructions on how to download and use will be provided. Individual CAP members are invited and encouraged to participate in a survey that will be conducted by Argyle soon.</p> <p>There were no questions.</p>	
	G. delivered a presentation about the Volunteer Cancer Driver's Society, an organization Parkland is proud to support in the community.	Gord Locke
8	Roundtable Discussion	
	No further discussion.	
9	<p>Acceptance of CAP Members Vote</p> <p>A vote was conducted and the two new members were unanimously accepted to join CAP.</p>	Andrea Manchon
	The meeting ended at 7:36 p.m.	

Follow up Actions		Deadline
1	<b>ACTION: Parkland to provide CAP members with publicly available historical data on SRU exceedances.</b>	May 2022
2	<b>ACTION: Rajvir will collect community ideas for replanting trees in and around the refinery.</b>	April – June 2022
3	<b>ACTION: Keep CAP members and public informed on HHRA feedback from health authorities and summarize any changes or responses.</b>	Ongoing