

Summary Meeting Notes

Wednesday, September 15th, 2021 (via Zoom)

6:00pm-7:30pm

CAP REPRESENTATIVES:

- Kathy Mezei
- Aswinee Rath
- Tim Maryon
- Tony Bosello
- Judith Roche
- Davis Vaitkunas
- Daniel Wood
- Michele Joel

Regrets:

- Amy Smith
- Brian Clive
- Joanne Smith

PARKLAND REPRESENTATIVES:

- Nick Middleton, Director, Health, Safety & Environment
- Vicki Bowman, Environmental Manager
- Kate Groves, Director, Operations
- Rajvir Rao, Community Relations Manager
- Jessica Bermudez, Community Relations Coordinator

GUEST SPEAKERS:

WSP:

- Theresa Repaso-Subang
- Francis Ries

Metro Vancouver:

- Darrell Wakelin
- Jason Mushtuk

FACILITATOR:

Judy Kirk, Kirk & Co. Consulting Ltd.

NOTETAKER:

Wisam Souki, Kirk & Co. Consulting Ltd.

ACTIONS ITEMS:

Item	Responsible
Carlton tree removal update	Kate Groves
Additional HHRA Plan questions follow-up	Vicki Bowman

MEETING AGENDA and Q&A:

1) Welcome – Judy Kirk, Facilitator

Judy welcomed the attendees and provided a brief land acknowledgement for the unceded territory of the Musqueam, Tsleil-Waututh, and Squamish Nations. The meeting agenda was reviewed, and there were no outstanding items to add.

2) Operational Update – Kate Groves, Director of Operations

Kate provided a Health, Safety, Environmental & Tree Update and the 2021 Maintenance Schedule to the CAP:

- i) Health:
 - COVID-19 site protocols and guidelines remain in place. There have been no work-related COVID-19 cases since the last CAP meeting.
 - There has been a hold on non-essential employees returning to the Refinery and SOLO offices to reduce traffic during upcoming scheduled maintenance.
- ii) Safety:
 - There have been two personnel safety incidents since the last CAP meeting. Both individuals received medical treatment and returned to work.
- iii) Environmental:
 - A power dip that occurred on August 26 resulted in an elevated flare, multiple equipment trips and an environmental exceedance of permitted SO₂ from the Sulphur Recovery Unit (SRU).
 - The main reaction furnace in the Sulphur recovery unit shutdown on September 9. This resulted in an environmental exceedance from 4:00pm to 5:00pm. The SO₂ was well below the ambient objectives at all air quality monitoring stations.
- iv) Tree Update:
 - Site maintenance of trees was completed with the appropriate approvals and permits since the last CAP Meeting.
- v) Upcoming Maintenance Event Schedule:
 - Maintenance will start the first week of October and end in mid-November.
 - This will be a 24/7 operation.
 - There will be a 'no left sign' on Gamma to minimize residential traffic. All traffic will be directed to travel west on Penzance Drive.

Q&A:

Q1. When there is a power dip, is there a backup mechanism that allows for the sulphur recovery unit to continue operating?

A1. (Kate Groves) The power dip is relatively short, it's a matter of seconds. We are fed from two BC Hydro feeders, and if they have a 'fault' on these feeders – typically, this could be a tree falling on a line,

we maintain the power to the site but, but when the tree falls, it creates a very minor dip. We have very sensitive equipment that's designed to shut down at any voltage dip and we have to manually turn that back on. We do have back up power that continues to run to the refinery, but even a generator, with a short dip like that, would not be able to help.

Q2. You mentioned the flare did not exceed the design capacity measured for an hourly flow. Was there any exceedance of any kind for a shorter time sampling period, like a minute or a few seconds?

A2. (Kate Groves) The design capacity of the flare is far greater than what we are required to report to Metro Vancouver, so we report any higher flow rates as per our permit over an hourly average. However, the instantaneous rate was still well below the total design capacity of the flare.

Q3. In regard to the cedars that were planted at the foot of Carlton for site mitigation, two cedars are dying, and two others have been removed. Since it is Fall, are these going to be replanted soon?

A3. (Kate Groves) We don't have the answer right now, but we will make a note of that.

Q4. What are you doing to be proactive about traffic? Will you ensure people don't turn left when coming up from the refinery? How will you ensure there is enforcement of the traffic measures you are taking?

A4. (Kate Groves) We have traffic control plans in place that are with the City right now for approval and we expect the City of Burnaby to place a No Left-Turn sign at Gamma. It's very important to us to address this behaviour by getting the license plates of the individuals that turn left when they are not supposed to and making sure we track them down to have a conversation with them. We also know the City of Burnaby is working on a mitigation plan and that they will soon share details with us.

3) Human Health Risk Assessment (HHRA) – Vicki Bowman, Environmental Manager

Vicki Bowman provided an update on the refinery's Human Health Risk Assessment (HHRA) process.

- i) The Refinery is conducting a HHRA on its air emissions that will support a new air permit application.
 - WSP, an independent third party, has been commissioned to draft a workplan.
 - The community and stakeholders were consulted from August 19 to September 12 and feedback is being reviewed.
 - The new air permit application includes emissions reductions in Nitrogen Oxides (NOx), Sulphur Oxide (SOx), and Particulate Matter (PM).
- ii) Regulators and Health Authorities, including Metro Vancouver and Fraser Health, are reviewing study plans and the final report.
- iii) Francis Ries, from WSP, informed the process conforms to Health Canada and BC Ministry of Health frameworks for the conduct of HHRA, and also provided a general overview of WSP's proposed HHRA Process. The process includes the following categories:

- i) Problem statement: This category details the emissions sources that will be assessed, what substances will be assessed, how these substances are expected to interact with people, and the different populations that are expected to interact with the substances.
 - WSP proposes to focus on air emissions from operations within the Parkland Refinery and Tank Farm, including criteria air pollutants nitrogen dioxide, sulphur dioxide and fine particulate matter, and volatile organic compounds benzene and 1,3-butadiene.
 - The proposed exposure pathway will focus on inhalation of air-borne chemicals.
 - WSP would assess risks for a wide range of different groups, including residents, school students, outdoor recreational users, those at healthcare and seniors' facilities, and First Nations residents and outdoor users.
 - The study area encompasses a 10kmx10km box centred on the refinery.

- ii) Exposure Assessment: this step involves estimating the levels of the various chemicals of concerns throughout the proposed study area. WSP is planning to use two approaches:
 - The first approach employs measurement data from Metro Vancouver air quality monitoring sites located in or near the study area.
 - The second approach employs a dispersion model, which is a specialized mathematical software tool that allows us to predict concentrations of the chemicals of concern throughout the study area based on known emissions from the Parkland facility, and meteorological conditions in the study area.

- iii) Hazard Assessment: This step is primarily a review of the health literature for each chemical of concern to determine the best current understanding of the health impacts and thresholds below which impacts are expected to be minimal.

- iv) Risk Characterization: exposure assessment data and hazard assessment data come together in the Risk Characterization step to determine the predicted health risks for each different population group throughout the HHRA study area.

Francis noted the results of this whole process will feed into an HHRA report which will be shared with regulatory agencies, health authorities, and stakeholder groups. The results will also inform Metro Vancouver's consideration of Parkland's proposed air emissions permit application but will also inform Parkland's decision making around mitigation measures and additional emissions and air quality measurement.

Vicki Bowman provided information regarding the HHRA schedule:

- The HHRA will be completed between September to December 2021.
- The HHRA submission will take place in early 2022.

Q&A:

Q1: Will the study be peer reviewed?

A1 (Vicki Bowman): The HHRA is being reviewed throughout the entire duration of the study and a final report will be reviewed by the appropriate regulatory and health authorities, such as Metro Vancouver, Fraser Health and First Nations Health Authority. These are the jurisdictions that set the framework for how the study should be done and are qualified to give a review.

Q2. So there won't be another third-party independently reviewing the work done by WSP?

A2. (Vicki Bowman): No, it's not part of the process right now, given that the health authorities and regulators are providing an in-depth review.

Q3. How will the questions about the plan that were sent to Parkland be answered?

A3. (Vicki Bowman): Thank you for sending those questions, Kathy. We are in the process of going through your questions and will send our answers directly to you. We will also consolidate all the feedback we received and will circulate them with the CAP and post them on our website.

4) Metro Vancouver – Jason Mushtuk

Jason provided an update on behalf of Metro Vancouver, found in **Appendix 1**.

Q1. Are the probable causes attributed to the refinery based on geographic proximity?

A1. (Jason Mushtuk): It can be a variety of reasons, depending on location, complaints, familiarity with the odours, etc.

5) Community Relations Update – Rajvir Rao

Rajvir provided an update on new community relations developments, and informed about other projects not conducted by Parkland happening in the area:

- i. Community Relations:
 - Openness to conduct orientation sessions and tours of the refinery as well as to interact more with CAP members, following COVID-19 protocols
 - An update on the community relations website
 - A new community email and community inquire line
 - An option for community members to upload a brief bio and picture when sharing feedback on the website
- ii. Other developments:
 - BC Hydro completed a System Impact Study at the Refinery

- Vancouver Port's Connect Coast Project is anticipated to start in December 2021, and it involves laying a marine fibre-optic cable from the Vancouver Convention Centre, around Brockton point and out the Harbour to Gabriola Island.
- CP Third Rail in Area 1 entails the addition of a third rail north of the two existing rails. It will start north of our Area 2 facility and ending at the Cascadia/Viterra Grain terminal.
- City of Burnaby's Mass Notification System RFP

Q&A

Q1. Are the short bio and picture voluntary?

A1 (Rajvir Rao): Absolutely. It is voluntary.

6) Roundtable:

Roundtable questions and comments:

- 1) The existence of a subcommittee that focuses on mass notification was brought up as an option for Parkland staff to further interact with CAP members.
- 2) Darrell Wakelin shared further information about the HHRA:
 - The initial HHRA was conducted by UBC.
 - The level of expertise and knowledge within Metro Vancouver is much greater than when the UBC study was conducted. Metro Vancouver has the appropriately qualified staff to conduct an in-depth review of the HHRA.
- 3) Theresa Repaso-Subang provided more information about her background as a diplomat with the American Board of Toxicology and a European registered toxicologist. She also recognized the concerns regarding technical matters that some CAP members may have and ensured her team will work hard to provide a high-quality assessment in an easy-to-understand way.
- 4) Rajvir Rao pointed out to the CAP that the next meeting will be a public meeting.

Closing comments – Kate Groves

Meeting ended at 7:06 pm.