

**Minutes of the Chevron Burnaby Refinery
Community Advisory Panel (CAP)
Wednesday, May 10, 2017
6:30pm – 8:30pm
Refinery Office (Boardroom) 355 North Willingdon Avenue**

PRESENT

Al Mytkowicz, Helen Ward, Rob MacLean, Michael Coyle, Davis Vaitkunas, Maziar Kazemi, Kathy Mezei; Rich Baerg, Joanne Smith, Aswinee Rath, Eileen Luongo

Chevron representatives:

Dave Schick, Policy, Government and Public Affairs Manager; Kel Coulson, Policy, Government and Public Affairs Rep; Steven Parker, Refinery Manager; Jill Donnelly, Health, Environment, and Safety Manager;

Metro Vancouver Representative:

Larry Avanthay, Darrell Wakelin, and Regulatory Representatives from MetroVancouver

Facilitator:

Catherine Rockandel, Rockandel & Associates

Regrets: Jason Mushtuk, Peter Turner

CAP BUSINESS

1. Opening Remarks

- Welcome to CAP – Catherine Rockandel

2. Chevron Updates

a. General Refinery Operations – Steven Parker

- We are currently having a smooth run operating Safely, Reliably and Profitably.
- Safety: we are having our best safety run to date. We had 1 treatment injury (pinched finger) in January.
- Reliability: we have the highest utilization of all the Chevron refineries.
- We are busy prepping for our 2018 turn around. We are focused on having larger events less frequently to have less of an impact to the community and allow us to operate for longer periods of time between maintenance events. The 2018 event will feel about the same as the 2015 event did in terms of a community impact around traffic, parking, and length of time.
- Steve announced his retirement after approximately 43 years in the business.

Comments and questions about the update:

Q1: The steam whistle went between 10 and 10:30 was that test?

A1: Yes, the whistle at 10:20 was a test.

C2: I recently read an article on Chevron's successes in meeting objectives and accomplishments. Congratulations. (Attachment One)

b. Confederation Park Update – Dave Schick

- We are currently putting lids on the trenches and backfilling. This should be completed by end of May, 2017.
- We will then hydro seed (wild /tall grass) and restore trails in early June.
- We plan to complete all pipe lines commissioning by mid-June.
- We plan to open up the trails by mid-late June. All fencing will be removed.

Comments and questions about the update:

Q3: Will that allow people to access the trail?

A3: Yes, it will be accessible to the public and look as natural as possible.

Q4: There was a report from the block watch of someone throwing rocks at the pipeline, is that area private property?

A4: Yes, security responded to teenagers throwing rocks on pipelines and somebody knocked the fence over.

Q5: What about access to the ocean?

A5: There was no plan to provide access. The tracks are private property so access would be trespassing and railway lines are dangerous for public access.

Q6: Have you talked to CN about it?

A6: No, It is unlikely CN/CP would give permission.

Q7: Is access to the water physically blocked access.

A7: No, but it is more difficult to get to.

c. City of Burnaby PPA Update – Dave Schick

- Our 2018 turnaround for planned maintenance will be the largest turnaround event in the facilities history. In order to be prepared to handle the complexity of the logistics and scale associated with this event, we are preparing additional laydown and parking areas to support the event.
- A large paved area behind the training center has been proposed that will function as both a vehicle parking area as well as a laydown area for materials and equipment during the turnaround. This will alleviate parking issues along Penzance both during the turnaround and during large training

events when parking can have overflow.

- Chevron is working with the City of Burnaby on the PPA associated with this proposed area.
- We are working to maintain sight lines and address the concerns of the immediate adjacent neighbours.
- The legal parcels of Chevron can be viewed at:
<http://webmap.burnaby.ca/publicmap/>

Comments and questions about the update:

Q8: Is the proposed paved area being created in the forested area, and would some tree removal be required?

A8: It is between the Hydro substation and new fire station. Yes some tree removal would be required.

Q9: Is it temporary and is this private property?

A9: No it is not temporary as there are turnarounds every few years so the parking would be required. It is private property.

Q10: How far around the mountain does Chevron property extend?

A10: CAP viewed the City of Burnaby GIS map.

d. Co-Processing Trials Update – Dave Schick

- Burnaby refinery completed the short-term commercial scale test run of co-processing biofeedstock on May 5th.
- The test run was completed with zero safety or environmental incidents.
- The data collected from the test run will take several months to fully analyze but the immediate results appear promising.
- The significance of this is that we can produce low carbon transportation fuels using our existing equipment on site.

Comments and questions about the update:

Q11: In terms of carbon intensity, is the majority of carbon savings because it does not get pumped from the ground and shipped?

A11: Carbon intensity is determined by full lifecycle and the reduction of GHGs. This is an exciting development as feedstocks can potentially be from waste materials as well, such as the municipal wastewater system or forest residues.

Q12: Where does the feedstock come from?

A12: It comes from the prairies. Finding an adequate quantity of feedstock is challenging.

Q13: Does it use the same infrastructure?

A13: Yes.

Q14: Is it fresh oil or used oil sourced from kitchens? And how much recovery percentage did you get?

A14: It was fresh oil. Early indications are yields are similar to crude oil.

Q15: What is the road map to commercialization? Do you predict 5 years?

A15: We would assess impacts before commercialization, it is hard to say how long it will be before this process becomes commonplace. There are significant policy drivers to move in this direction.

Q16: What are the impacts on community of biofeedstock versus oil refining?

A16: Community impacts of all testing are carefully monitored by Metro Vancouver.

C17: CAP member: This is promising, local politicians would like this.

Q18: Any more trials lined up for this year?

A18: Not likely as we are still analyzing the data.

Q19: Will Parkland continue with trials?

A19: Good question, we don't have an answer right now.

Q20: Could Chevron put together some talking points for CAP members as we would like to talk about this in the community.

A20: Yes, we could do that.

e. Metro Vancouver Climate Action Committee Update –

- On May 3rd staff from Burnaby refinery spoke at Metro Vancouver's Climate Action Committee in support of Metro Vancouver's proposed biomass to biocrude hydrothermal liquefaction project. Metro Vancouver's project could possibly provide the facility with low carbon biogenic feedstock that dovetails into our coprocessing initiative. The results would be lower carbon intensity of transportation fuels at commercial scale.

f. EOI - Parkland Update – (Presentation Attachment Two)

- Chevron Canada refining and marketing has signed off on a sales and purchasing agreement with Parkland Industries for Chevron's downstream fuels business.
- The refining and marketing assets in scope include the Burnaby Refinery, terminals and marketing assets. CCL's lubricants business is not included in this transaction. Upstream assets are not included in this transition.

- Chevron service stations will remain Chevron branded.
- It is business as usual as we transition and that will always mean being committed to the Chevron Way, staying focused on Operational Excellence and priding ourselves on delivering the best customer experience.

3. Parkland Acquisition Discussion Q&A

Q21: How many names does Parkland operate under?

A21: Parkland has 14 brands such as Esso/On the Run.

Q22: Where does YVR get another 2/3 of their fuel?

A22: Most of it comes by truck from BP Cherry Point in Washington State. The growth in air traffic is expanding and it is challenging to get enough fuel to meet demand.

Q23: In terms of Parkland how will they operate under Chevron?

A23: Parkland will operate retail stations under the Chevron brand.

Q24: I heard they bought and operated a small refinery and closed it six months later, do you know why that was?

A24: We are not familiar with this situation but Parkland's intention to operate the Refinery is evident from their significant financial commitment.

Q25: Is the access to crude impacted by the Parkland acquisition?

A25: Don't know what the implications are if any. In previous years we had less crude from the pipeline as we would like It was a pipeline allocation issue.. Over the last couple of years, we have been able to get crude we need from the pipeline to operate effectively.

Q26: How much of the success of the business is dependent on drawing on Chevron corporate?

A26: Chevron corporate has supported the refinery but successful operation can be managed locally or additional expertise sourced from external technical resources as needed.

Q27: What about backroom systems such as IT, accounting?

A27: The coordination of systems is being worked on. The refinery has some new systems, so the documentation is up to date.

Q28: Would Parkland help finance an emergency notification system?

A28: We can't speak for them but we would make the case that an initiative in this area would reflect good corporate citizenship.

Q29: Why have we not seen any headlines about the sale?

A29: There have been some articles, but while it goes through regulatory process we are still operating as Chevron and the brand will still be the same.

Q30: Was Chevron surprised how quickly it sold?

A30: No, this is strong business. There was a lot of interest from several different parties.

Q31: Would Parkland inherit employees and management? What is the implication for labour negotiations?

A31: Labour negotiations were paused until there was clarity on a buyer and Chevron will continue negotiations now a sale decision has been made.

Q32: Does Chevron have position in Albion Sands in Alberta?

A32: Yes, it is not part of the Parkland sale.

4. CAP Q&A

Other issues that CAP brought forward from the neighbourhood:

Q33: In news they were talking about fugitive emissions of methane, does this happen at refinery?

A33: This is generally an upstream issue primarily, not normally about refining.

5. Metro Vancouver Update – Larry Avanthay

Overview of MV Update: Thursday, May 10, 2017

Reporting Period: February 2017 through April 2017

Overview of MV Update

a. Air Quality Complaints

Month/Year	Complaints	Confirmed	Comments
Total 2015	41		Total complaints identified in Chevron's Odour Management Plan Annual Review submitted March 31 st .
January to October 2016	46	38	
November 2016	4	4	
December 2016	3	3	
Total 2016	53	45	Annual Chevron complaint summary confirmed total complaints received by Chevron from MV (53) and the public (10) totalled 63.
January 2017	9	6	Six odour complaints on January 23 rd . MV odour survey confirmed presence of a petroleum type odour beyond plant

			boundary. Source believed to be related to Chevron marine vessel loading of a heavy gas/oil product. One complaint also related to visible emissions.
February 2017	5	5	1 oily sewer.
March 2017	7	5	Two complaints from resident of 3400 Blk Oxford Street in Vancouver. Odour was described as rotten egg and not believed to be attributable to Chevron. Natural gas odour was reviewed with Fortis BC acknowledged “phantom odour” calls as well but no known source. 2 oily sewer.
April 2017	2	2*	*Total to be confirmed.
Total to Date	23	18	No complaints yet registered in May.

b. Odour Surveys

Date	Activity
2016 Total	Eight odour surveys documented for 2016.
Monday January 23, 2017	Odour survey conducted in neighborhood adjacent to Area 1 tank farm.
Wednesday March 15, 2017 0949 to 1031 Hrs	Survey conducted in neighborhood adjacent to Area 1 including Trans Canada Trail. Low level petroleum odour identified over large area. Possibly area vs point source. Odour was just discernible and resembled odour in a vehicle garage or oil change shop.
Wednesday March 29, 2017	Odour survey identified slight bleach odour immediately adjacent to sanitary manholes on Penzance/Beta. Bleach odour was attributed to Chevron bleach injection required as condition of wastewater discharge permit.
Thursday, May 4, 2017	Odour survey conducted along Penzance adjacent to refinery and on section of Trans Canada Trail immediately above refinery. Chevron was conducting their biofuels trial at time of survey. No odours identified.

c. Site Inspections/Meetings

Date	Activity
Wednesday, February 15, 2017	Witness particulate matter sizing survey on FCC.
Thursday, March 30, 2017	Witness Crude Unit (ES01R) NOx annual emission

	survey.
Tuesday, April 11, 2017	Tour of refinery (Area 2) to familiarize the addition of a Senior Project Engineer to our group.

d. SOx Curtailment Events

Date	Activity
2017-03-20 0700 to 0800Hr 1700 to 1800Hr	Two SCE triggered based on SO2 readings at T23 (Capitol Hill) above the 190 ppb permit set point. Calm, stagnant, meteorological conditions during the periods of the SOx Curtailment Events. Chevron is still investigating their response to the early morning incident. Chevron is to submit report on their activities in response to SCE.

e. Miscellaneous

Date	Activity
2017-04-19	City of Burnaby parks staff conducted pruning of trees growing immediately adjacent to the T23 Capitol Hill monitoring station. MV had requested the pruning.

Comments and questions about the update:

Q34: What is the status of ambient monitoring stations? Are they always running at 100%? Is there regular maintenance on monitors?

A34: Station operation is continuously monitored and there is an established schedule for monitor inspection, maintenance and calibrations. Any non-routine down time of instruments would be recorded. Chevron permit includes notification of any period of greater than 4 hours that ambient station data is unavailable. MV also notifies Chevron when instrument calibrations are being conducted and SO2 monitor is out of service for a period that may exceed 4 hours.

Q35: Would you consider adding a taller sampling pole on a station rather than pruning trees?

A35: The siting of a station and location of instrument sampling points follow specified standards and guidelines. Additional monitoring is being considered at this station (T023), which was what prompted the request for the nearby trees to be pruned. Location and size of the monitoring trailer are also variables being considered prior to establish additional monitoring.

Q36: Where is the Capitol Hill monitoring station located?

A36: It is in the park. *(Note T023 is located in Harborview Park on Grosvenor Crescent on Capitol Hill – also Station Information Details can be found in 2012 on-line MV Air Quality report*

<http://www.metrovancouver.org/services/air-quality/AirQualityPublications/LowerFraserValleyAirQualityMonitoringNetwork2012StationInformation.pdf>).

Q37: In terms of natural gas complaint, what was the source of the phantom odor?

A37: Our follow-up included a review of the wind speed and direction data from T23 and T24 as well as the ambient monitoring data such as Total Reduced Sulfur and Total Hydrocarbon. One of the odour incidents reportedly occurred mid-day and with an easterly winds odour would need to pass through a densely populated neighborhood. No other public complaints were registered. The complainant lives immediately adjacent to Highway 1, which is some distance from refinery and tank farm. Since the odour was described as resembling natural gas the area supervisor for Fortis was contacted to determine if they had received similar type complaints. They have field staff who typically can attend the area of complaint within minutes. The supervisor advised that they had received a number of similar complaints in this geographical area the previous two weeks but their field staff had not witnessed the “phantom” odour. Based on these findings the odour was coded as being from an unknown source.

6. 2017 CAP Meeting Schedule & Agenda Topics

- Catherine reminded CAP of the next meeting on September 20th, 2017 at 6:30pm
- CAP suggested that they would like to meet new refinery manager in September
- SEEP update + tour
 - SEEP final remedy continues to move forward.
 - Those interested in having a tour this summer should connect with Catherine.

ADJOURNMENT: Meeting adjourned at 8:15