

**Minutes of the Parkland Burnaby Refinery  
Community Advisory Panel (CAP) and Annual Public Meeting  
Wednesday, November 22, 2017  
7:00 – 9:00pm  
Confederation Seniors Centre**

**PRESENT**

Al Mytkowicz, Michael Coyle, Davis Vaitkunas, Joanne Smith, Aswinee Rath,

**Parkland representatives:**

Dave Schick, Policy, Government and Public Affairs Manager; Kel Coulson, Policy, Government and Public Affairs Rep; Jill Donnelly, Health, Environment, and Safety Manager; Peter Turner, Operations Manager

**Regulatory Representatives**

Metro Vancouver: Darrell Wakelin and Jason Mushtuk  
Fraser Health: Dr. Aamir Bharmal

**Facilitator:**

Catherine Rockandel, Rockandel & Associates

**Regrets:** Maziar Kazemi, Rich Baerg, Helen Ward, Rob MacLean, Kathy Mezei, Eileen Luongo, Chris Cavote, Refinery Manager

**Guests:** Michael Lowry, Western Canada Marine Response Corporation (WCMRC); Gord Bruce, Turnaround Team Lead; Josh Wood, Director Corporate Integration.

**CAP BUSINESS**

**1. Opening Remarks (See Attachment One)**

- Catherine Rockandel welcomed CAP members and members of the public. She led the introductions of CAP and guests and then provided an overview of the agenda
- Dave Schick introduced Name/Parkland rep and Gord Bruce, Turnaround Team Lead, Parkland
- 11 members of the public attended the meeting

**2. Refinery Updates**

**a. General Refinery Operations – Pete Turner**

- Parkland is in the process of hiring a new General Manager for the refinery
- The refinery team are preparing for turnaround in 2018
- The construction of new parking lot is proceeding with focus on minimizing traffic

congestion. The recent heavy rains have presented unique challenges for construction and storm water management.

**b. Parkland Update – Dave Schick**

- Due to the Parkland transition the public meeting notice was distributed later than usual. Dave extended apologies to the community for short notice.
- The refinery continues to work contractors and staff to manage traffic issues. Please contact the RCMP if you witness any infractions.
- The permanent solution for the SEEP is now in place.
- The refinery team is completing the transition to Parkland with virtually the same staff prior to the acquisition. Parkland is committed to performance safety, being a good neighbour and social investment in the neighbourhood.

Comments and questions about the update:

**Q1:** What is a turnaround?

A1: It is an event where the portions of the refinery are shut down to conduct inspections, repairs and modification. The only way to do this type of work is when the refinery is not running.

**3. Presentation: (Attachment Two and Three)**

Marine Spill Response on the West Coast – WCMRC (Michael Lowry)  
Parkland Marine Response (Kel Coulson)

Comments and questions about the presentation:

**Q2:** Are WCMRC current staff the response staff?

A2: Yes and we also rely on contractors, to tow booms etc. Over the last several years, we have transitioned to our own staff for our major assets. 80 are the full time people.

**Q3:** How is board of WCMRC elected or are they appointed?

A3: They are appointed with one vote per board member.

**Q4:** In the event of a spill who is on first in the event of overlapping jurisdictions?

A4: Utilize a unified command incident process with the federal representatives being Coast Guard followed by Ministry of Environment

**Q5:** Do you or the Coast Guard activate the Marine Response in the event of a spill?

A5: The party responsible (under the polluter pay system) or the Coast Guard.

**Q6:** How can people have trust and confidence in this system if for example in the case of the English Bay spill it was leaking for six hours?

A6: The government has made many improvements including producing the Greater Vancouver Integrated Response Plan (GVIRP)

**Q7:** Why did WCMRC not self activate?

A7: We cannot self activate under the guidelines for emergency response.

**Q8:** Are the other response organization in eastern Canada?

A8: Yes, in the Great Lakes and St Lawrence River, as well as at Point Tupper.

**Q9:** How does the English Bay spill compare to the Valdez spill?

A9: The English Bay spill resulted in 2,700 litres of Bunker C fuel spilling. The Exxon Valdes spill was 10.8 million US gallons of crude oil.

**Q10:** WCMRC is a private organization, do you have AGMs and are you subject to Freedom of Information requests.

A10: The WCMRC is a non-government organization. We are not subject to FOI requirements. However, industry does not dictate planning requirements.

**Q11:** Who are the other board members?

A11: They are the founding five board members from Burrard Clean.

**Q12:** How big are the big Aformax tankers?

A12: They are 80,000 tons at 80% full.

**Q13:** The size of the tankers is doubling. In the event of a spill would all of the oil leak out?

A13: The fuel is dispersed over several compartmented tanks in the ship.

**Q14:** Where are actual booms stored?

A14: WCMRC has storage facilities all over Burrard Inlet including on vessels and in Sea-Cans.

**Q15:** Do you have any comments on the implications of the advancement in technology?

A15: Many of these new technologies involve putting another product into ocean. The biggest innovations are in skimmer systems. However, in Canada we are prohibited from putting oil in water to test equipment. Many companies were able to test equipment related to the Deep Water Horizon event in Florida.

**Q16:** I am curious about the process for identifying general and health risk zones?

A16: Dillon Consulting did assessment from Samson model including the use of heat maps to assess risk sites. They ran modeling to understand impacts.

**Q17:** What about the air quality impacts from a spill?

A17: All responders are trained and use air quality monitors, particularly Benzene near communities. In 2007 WCMRC was activated to respond to a spill when a backhoe ruptured a pipe. The product got into the storm drains and ended up in Burrard Inlet. Even with 100 tons of synthetic bitumen after 20 minutes the light end had evaporated.

**Q18:** Where is the disposal facility?

A18: There are two, one in Surrey and the other on Vancouver Island. The product is trucked and mini barged to treatment facility, which manages waste.

**Q19:** What is WCMRC operating budget?

A19: It is currently 10 million but could up to 50 million potentially funded by Kinder Morgan.

**Q20:** Have you heard of any oil spills that occur naturally?

A21: Yes, in California surfers often get natural oil on them that leaks up from the sea floor. There are natural microbes that consume that product so often goes unnoticed.

**4. Metro Vancouver Update – Jason Mushtuk**

**Reporting Period: October 2017 through November 2017**

**Overview of MV Update Content**

Metro Vancouver has the regulatory authority specific to the discharge of air contaminants and management of non-domestic waste to sewer within the region. The Chevron Burnaby refinery has both an air discharge permit and liquid waste discharge permit that we administer. Both the permits have extensive monitoring and reporting requirements.

Typically our summary at CAP is a snapshot of some of the activities related to the administration of the permits conducted since the last CAP reporting period.

Topics can include:

- Site Inspections
- Summary of air quality complaints
- Odour surveys
- Response to specific Incidents (i.e. Chevron Advisories)
- Regional air quality management initiatives such as Bylaw development.

**a. Refinery Notifications**

<b>Date</b>	<b>Level</b>	<b>Discussion</b>
February 5, 2017 (0000 Hrs)	One	<b>Burnaby Refinery Power Outage</b> Loss of power took some refinery units off line following a power outage during evening of February 4 <sup>th</sup> . System to manage flaring is operational.
February 22, 2017 (1700 Hrs)	One	<b>Controlled Shutdown of Crude Unit</b> Controlled shutdown of the crude unit in order to carry out repairs to process piping. The shutdown is expected to be completed by evening of 23 <sup>rd</sup> . There is the potential for elevated flaring as the unit is shutdown and subsequently restarted.

May 23, 2017 (2100 Hrs)	One	<b>Burnaby Refinery – Power Outage</b> Brief interruption (~6PM) in external power supply (BC Hydro). Experienced elevated level of flaring. SRU acid gas to flare. Audible alarms in area 2 (radiant heat from flare/H2S at Process Unit). One complaint from Capitol Hill – see May summary below.
September 8, 2017	One	<b>Burnaby Refinery – Maintenance Event</b> Controlled shut-down of Poly and Penex units for planned maintenance between Sept 8 <sup>th</sup> to 30 <sup>th</sup> .

**b. Air Quality Complaints**

Month/Year	Complaints	Confirmed	Comments
<b>Total 2015</b>	<b>41</b>		Total complaints identified in Chevron's Odour Management Plan Annual Review submitted March 31 <sup>st</sup> .
<b>Total 2016</b>	<b>53</b>	<b>45</b>	Total received by Chevron from MV and public was 63. Analysis – September highest month (16% - 9 complaints) – Increase related to oily sewer 22 in 2016 vs. 4 in 2015.
<b>January 2017</b>	<b>9</b>	<b>6</b>	Six odour complaints on January 23 <sup>rd</sup> . 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.
<b>February 2017</b>	<b>5</b>	<b>5</b>	1 oily sewer.
<b>March 2017</b>	<b>7</b>	<b>5</b>	Two complaints from resident of 3400 Blk Oxford not believed to be attributable to Chevron. Natural gas odour – Fortis BC acknowledged “phantom odour” calls as well but no known source. 2 oily sewer.
<b>April 2017</b>	<b>2</b>	<b>2</b>	Confirmed.
<b>May 2017</b>	<b>1</b>	<b>1</b>	Interruption in power supply. Note complaint from resident (Cap Member) of rotten egg odour attributed to facility power outage/flaring. Resident identified concern with audible alarms

			and subsequent odour and what was happening at the facility. (#15973)
<b>June 2017</b>	<b>4</b>	<b>4</b>	
<b>July 2017</b>	<b>1</b>	<b>0</b>	Burning odour/fallout attributed to neighborhood fire of cedar hedge confirmed by BFD.
<b>August 2017</b>	<b>3</b>	<b>3</b>	Odour survey conducted in response to two odour complaints on 29 <sup>th</sup> .
<b>September 2017</b>	<b>2</b>	<b>0</b>	Residential paving activities may have been contributor to complaints (Sept 23 <sup>rd</sup> )
<b>October 2017</b>	<b>0</b>	<b>0</b>	*Note complaint Oct 30 <sup>th</sup> of yellow deposit on Capitol Hill- determined to be pollen. Refinery not contacted
<b>November 2017</b>	<b>1</b>	<b>1</b>	To date – monthly summary to follow.
<b>Total to Date</b>	<b>35</b>	<b>27</b>	

**c. Odour Surveys**

<b>Date</b>	<b>Activity</b>
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 TCT. Low level petroleum odour identified over large area. Possibly area vs point source. Odour similar to oil change shop. Just discernible level.
Wednesday March 29, 2017	Odour survey identified slight bleach odour adjacent to sanitary manholes on Penzance/Beta. Very brief Propane or butane odour was also identified adjacent to T24 North Burnaby station. Identification of a possible source not yet identified.
Thursday, May 4, 2017	Odour survey conducted along Penzance adjacent to refinery and on TCT above refinery. Chevron was conducting biofuels trial. No odours. Also conducted odour survey along Penzance trails with Vick bowman of Chevron. No odours detected.
Tuesday, August 29, 2017	Odour survey conducted along Area 1 perimeter and into adjacent neighborhood also along Penzance. No odours consistent with refinery operations were detected.

Monday, September 25, 2017	Responding to odour complaints on the weekend, odour survey conducted along Area 1 perimeter and into adjacent neighborhood also along Penzance. No odours consistent with refinery operations were detected. Observations of recent road paving in the area a possible source.
Friday, November 17, 2017	Responding to odour complaint of oily sewer odours in the area of Penzance/Beta as well as confederation Park off-leash trail, odour survey identified slight bleach odour adjacent to sanitary manholes on Penzance/Beta. No odours consistent with refinery operations noted along the trail.

**d. Site Inspections/Meetings**

<b>Date</b>	<b>Activity</b>
Wednesday, Nov 30 <sup>th</sup>	Witness consultant testing of SRU stack emissions.
Thursday, Dec 1 <sup>st</sup>	Site tour of Area 1 Tank Farm including tank seal inspection.
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). Introduce Rob Kemp, SPE.
Tuesday May 30, 2017	Area 1 inspection tour with focus on rail car propane/butane loading practices. (LA/JM/RK)
Wednesday, July 19, 2017	LDAR Area 1 (JM)
Tuesday, August 1, 2017	PM sizing survey of FCC witnessed by AQ staff (LS)
Wednesday, August 16, 2017	SO2 meeting
Wednesday, August 30, 2017	SO2 Dispersion modelling meeting
Wednesday, September 6, 2017	Meeting with Chevron CEMs auditor (Area2). Witness marine VRU compliance testing (Area 1). (LA/JM)

**e. Liquid Waste Permit**

<b>Date</b>	<b>Activity</b>
2016-12-21	Metro Vancouver audit sampling of wastewater. No exceedance for any of the monitored wastewater parameters.

2017-03-31	Qtr. 1 self-monitoring report identified two CN exceedances and fish toxicity. Toxicity due to combination of elevated sulphide and slightly acidic water. Violation letter to be issued.
	Elevated CN Study  June 15 <sup>th</sup> Amending document to authorize intermittent interruptions in sodium hypochlorite injection to conduct sampling and analysis of cyanide in effluent. The conclusion reached was that continuous bleach injection of their effluent resulted in detectable cyanide formation.

**f. SOx Curtailment Events**

<b>Date</b>	<b>Activity</b>
2017-03-20 0700 to 0800Hr 1700 to 1800Hr	Two SCE triggered based on SO2 readings above 190 ppb permit set point at T23.  Interim 1 Hr SO2 Objective of 75 ppb was exceeded during both events with hourly averages of 82.9 ppb and 79.1 ppb respectively.  Calm Stagnant inversion meteorological conditions. <b>Chevron investigation did not confirm cause of missed alert but reported testing of system indicates it is currently working properly (June 1<sup>st</sup> email).</b>
2017-10-28 0000-0100 Hrs	SCE triggered based on SO2 readings above 190 ppb permit set point at T23 (0030Hrs).  Interim 1 Hr SO2 Objective of 75 ppb was exceeded with hourly averages of 112.8 ppb.  AQ & CC investigation discovered that the SO2 analyzer had an upper level threshold set at 100 ppb, which caused concentrations above 100 ppb to be flagged as invalid. As a result Chevron would not have been aware that SCE trigger was met or been able to respond as required in their permit. AQ report issue has been resolved.

Comments and questions about the update:

**Q22:** Where are permanent air quality stations?

A22: They are located by the Parkland tank farm, Capital Hill, Kensington Park, near Second Narrows Bridge, and Pandora Park

**5. 2017 CAP Review:** Catherine Rockandel

- The CAP role is to engage and connect with neighbourhood. Twelve members participated in four regular meetings over the past year.
- CAP is a collaborative, transparent process with minutes are posted on website. The meetings focused on the following topics:
  - February Meeting: Emergency response protocols regulator integration into ICS and SEEP update for final remedy
  - May Meeting: Parkland Acquisition
  - September Meeting: 2018 Turnaround and overview of trades activity associated with turnaround events
  - November: Emergency management marine response
- CAP communications available at:
  - [www.chevroncap.com](http://www.chevroncap.com)
  - [www.parklandcap.ca](http://www.parklandcap.ca)

**6. Facilitated Q&A**

After the coffee break CAP and members of the public were invited to ask additional questions about the updates and presentations.

**Q23:** How did the Parkland and Chevron relationship occur?

A23: It was a year-long process that resulted in the announcement April 2017 of the successful bidder. Parkland is a Calgary based company. On Oct 1, 2017 all assets including service stations, which will stay branded as Chevron but refinery name have transitioned to Parkland.

**Q24:** We have noticed a significant increase of noise at the refinery at night. We live on the east side of Capital Hill. It is not construction noise

A24: We would appreciate that when you hear the noise to call the Parkland refinery number. A shift supervisor can investigate. We need your immediate feedback to support tracking down the issue.

**C25:** We have lived three blocks from tank farm for over 40 years and it is pretty quiet.

A25: The refinery uses equipment to monitor noise to ensure we comply with Burnaby noise bylaws and to protect workers.

**Q26:** Does Parkland have any other refineries?

A26: Parkland utilizes a facility north of Calgary that used to be a refinery to hold and move finished product. The Burnaby refinery is our first operating refinery.

**Q27:** Does the refinery refine diluted bitumen? Are you confident that you get enough product and won't have to use rail or trucks?

A27: The refinery utilizes light sweet crude. A multitude of products come down pipeline. For example: finished gas also gets shipped down pipeline. We haven't had to ship by rail or trucks since the process changed a few years ago.

**Q28:** When the refinery did get oil by rail was it light crude?

A28: Yes, it was.

**Q29:** What happened with that material that bubbled up under the tank farm along the foreshore?

A29: This happened 10-15 years ago. There was hydrocarbon on the water surface. Chevron extracted sediment from sea floor. The source of the product was unknown. It was a heavy product possibly from the previous wharf because of creosote. It was remediated completely.

**Q30:** Is the new wharf wood or concrete/steel?

A30: Its concrete steel.

**Q31:** What qualification does General Manager need? Parkland has not done refining before so how are they making sure they have the right people in place?

A31: Parkland is looking for a GM with refining experience and who would meet technical standards. We have kept technical staff from Chevron team. In addition several people on the Parkland management team have worked in refinery business. We have over 300 staff with people that have worked for 20,30, and 40 years in the refinery business.

## **7. 2018 CAP Agenda Planning**

CAP and the public did not have any suggestions beyond the usual updates and discussion topics including:

- Environment
- Emergency notification
- Plant and process safety
- Security and traffic
- Specific neighbourhood interests.

**ADJOURNMENT:** Meeting adjourned at 9 pm