

**Minutes of the Chevron Burnaby Refinery  
Community Advisory Panel (CAP) and Annual Public Meeting  
Tuesday, November 17, 2015  
7:00 – 9:00pm  
Confederation Seniors Centre**

**PRESENT**

Al Mytkowicz, Rich Baerg, Helen Ward, Rob MacLean, Kathy Argue, Joanne Smith

**Chevron representatives:**

Jessica Wolford, Policy, Government and Public Affairs Rep; Steve Parker, Refinery Manager; Kate Groves, Health, Environment and Safety Manager

**Metro Vancouver Representative:**

Larry Avanthay and Darrell Wakelin, Regulatory Representative, Metro Vancouver

**Facilitator:**

Catherine Rockandel, Rockandel & Associates

**Regrets:** Maziar Kazemi; Pat Connell; Kathy Mezei; Michael Coyle; Eileen Luongo; Dave Schick, Policy, Government and Public Affairs Manager.

**Chevron Management Guests:** Mike Ward, CCL Downstream Emergency Response Safety Security Lead

**CAP BUSINESS**

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

- Catherine Rockandel welcomed CAP members and the public to the meeting. She provided an overview of the agenda and invited CAP and Chevron management in attendance to introduce themselves.

**2. Chevron Updates**

**a. General Refinery Operations – Steve Parker**

- Steve provided a recap of the year including the largest turnaround in refinery history earlier this year. Chevron is very pleased that the capital and IT systems upgrades were completed on time with no incidents.
- Burnaby Refinery is a leader in safety and reliability performance amongst seven Chevron refineries in system. Chevron utilizes a balanced score card and this year the refinery is heading towards exceeding last years rating of 1,000 points, scoring at the top of all facilities in operational excellence.
- The 2016 small Turn Around involves the Alkylation unit which makes gasoline components by combining gaseous byproducts

**3. Metro Vancouver Update – Larry Avanthay**  
**Overview of MV Update**  
**Reporting Period: September through October 2015**

Metro Vancouver has the regulatory authority specific to discharge of air emissions 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 at facility
- Regional air quality management initiatives

**a) Air Quality Complaints**

Month	Complaints	Confirmed	OMP Evaluation
January 2015	2	2	
February 2015	0	0	
March 2015	7*	4	
April 2015	3	3	
May 2015	4	3	
June 2015	1	1	
July 2015	3	2	
August 2015	3	3	
September 2015	0	0	
October 2015	1	1	Final Number To be Confirmed – Chevron Odour Management Plan monthly summary report submitted end of following month (November).
November 2015	1	1	Based on review of complaints in Metro Vancouver data base for November 1 <sup>st</sup> to 15 <sup>th</sup> .
<b>Year to Date 2015</b>	<b>25</b>	<b>20</b>	

## b) Site Inspections/Meetings

Two site inspections conducted during this reporting period.

Date	Activity
Tuesday September 29, 2015 Site Inspection	Site inspection to observe particulate matter (PM) testing and review operating conditions of FCCU during third party stack testing.
Monday November 9, 2015 Site Inspection	Site inspection with AQ staff to witness SRU RATA testing as part of replacement of new CEMs monitor.

## c) SOx Curtailment Events (SCE)

Date	Discussion/Impacts
Friday, October 16 <sup>th</sup> , 2015	There was a single SOx Curtailment Event which is defined in Chevron's permit. Follow-up was conducted with Chevron to review their response to the incident. The Chevron response to the SCE was considered consistent with the requirements in their permit. Chevron provided confirmation that there were no process unit upsets or permit exceedances during the overnight shift (October 15/16) and that refinery operations were considered as being normal. (See Additional Reference Materials section for Permit SCE definition).

## d) Reported Liquid Waste Discharge Permit Exceedance

There were a total of three exceedances of two restrictions of the Waste Discharge Permit during the third quarter reporting period at the refinery. The exceedances were all considered minor in nature and a Violation Letter was issued. There were no exceedances of the Waste Discharge Permit reported during the first two quarters of 2015.

Comments and questions about the update:

**Q1:** When I register a complaint with Metro Vancouver is it typically coded against the Chevron refinery and included in the complaint total? Also if I register numerous complaints are they counted individually or are they considered a single complaint?

**A1:** When a public air quality complaint is registered in which Chevron is identified as the suspected source we forward the details of the incident to the refinery to follow-up and investigate consistent with their Odour Management Plan (OMP). Refinery staff will report back to Metro Vancouver on their findings. The Officer will typically review the complaint details to determine if the refinery is indeed the likely source based on the type of odour reported, a review of wind speed and direction at the nearest ambient monitoring station as well as the findings of the refineries investigation. We do not have to witness the odour in order to conclude the

refinery was the probable source as if someone living near the tank farm reports a gasoline type odour and there is an N wind it would be coded against the facility. Chevron staff have reported on incidents in past in which they acknowledged that they were likely source. Where possible an Officer will try to attend, especially where multiple complaints are registered during a short time period to confirm and conduct an inspection. As part of the OMP Chevron provides a report with the total of the complaints registered against the facility during the preceding month including those in which they are identified as the likely suspect. Also each air quality complaint registered is counted individually.

**Q2:** In terms of the SO<sub>2</sub> event you mentioned, how much was SO<sub>2</sub> over before it exceeded the hourly limit in the permit?

**A2:** The SO<sub>x</sub> Curtailment Event (SCE) is not a limit but rather a requirement in the Permit requiring Chevron to proactively reduce their emissions to hopefully avoid an exceedance of the hourly SO<sub>2</sub> Ambient Objective. The permit identifies a number of nearby Metro Vancouver ambient air monitoring stations with SO<sub>2</sub> monitors that provide data by the minute, which Chevron routinely monitors. If the SO<sub>2</sub> at the monitoring stations exceed a certain value (0.190 ppm) Chevron are required to take immediate action to reduce their emissions from the largest SO<sub>2</sub> source at the facility, the fluid catalytic cracking unit. Following a SCE the Officer will follow-up with Chevron to obtain details on their response to confirm they took appropriate actions consistent with requirements in their permit.

**Q3:** Air quality is an ongoing concern for the neighbours. What is the limit, which is considered an exceedance and what if any actions has Metro Vancouver taken?

**A3:** It is not always as simple as one number since the permit specifies different methods of monitoring for different processes within the Chevron refinery. Some sources have continuous emission monitors, which record levels constantly while others are measured a few times per year. You may wish to view a copy of the Chevron air quality permit which is available on our website.

Also the earlier reference was related to our Air Quality SO<sub>2</sub> Objectives, which are standards for ambient air quality standards and are not an actual limit within the permit. The most recent Annual Report is also available on our website and we'll include links in the minutes.

We have a range of responses available when an exceedance occurs which range from non-punitive such as advisory letters to punitive measures, which may include ticketing to legal charges. A ticket (MTI) was issued to Chevron earlier this year related to the unauthorized discharge of air contaminants. The ticket was not contested by Chevron who paid the fine amount of \$1000.

*Facilitator Closing Comment: There are also materials which can be found on the CAP website related to past presentations by Metro Vancouver including a Health Study related to Air Emissions from the Chevron North Burnaby Refinery and the Metro Vancouver presentation earlier this year on the Interim Ambient Air Quality Objectives for Sulphur Dioxide (SO<sub>2</sub>).*

## Additional Reference Materials

<p>SOx Curtailment Event (SCE) Definition within Chevrans Air Quality Management Bylaw Permit GVA0117</p>	<p>A SOx Curtailment Event (SCE) is defined as a time period when a sulphur dioxide concentration level at any of Metro Vancouver ambient air monitoring network stations T4, T6, T23 or T24 exceeds a 10-minute rolling average concentration of 0.190 ppm sulphur dioxide. The SCE is not in effect when the ambient air monitoring data is determined to be invalid by Metro Vancouver.</p> <p>For the purpose and duration that DeSOx additive is used in the FCC to manage SOx emissions, a set-point on the DeSOx additive controller shall be set at a level no higher than 240 ppm SOx. At the first available opportunity following the permittee becoming aware of an SCE, the permittee shall take all necessary steps, which may include lowering the FCC DeSOx additive controller set-point level, to achieve an ambient sulphur dioxide level at the affected ambient air monitoring station (T4, T6, T23, or T24) to below a 10-minute rolling average concentration of 0.190 ppm sulphur dioxide. Actions required by the permittee during an SCE are conditional on the availability of ambient air monitoring data provided by Metro Vancouver and refinery operational staff access to the data. At the first available opportunity, the permittee shall notify Metro Vancouver of time periods greater than 4 hours when computer system outages occur that will affect operator access to Metro Vancouver's ambient air monitoring data.</p>
<p>Lower Fraser Valley Annual Ambient Air Quality Reports</p>	<p><a href="http://www.metrovancouver.org/services/air-quality/emissions-monitoring/monitoring/reports/Pages/default.aspx">http://www.metrovancouver.org/services/air-quality/emissions-monitoring/monitoring/reports/Pages/default.aspx</a></p>
<p>Copies of Current Signed Air Quality Management Permits</p>	<p><a href="http://www.metrovancouver.org/services/Permits-regulations-enforcement/air-quality/apply-permit/Pages/default.aspx">http://www.metrovancouver.org/services/Permits-regulations-enforcement/air-quality/apply-permit/Pages/default.aspx</a></p>

#### 4. **2015 CAP Review: Catherine Rockandel**

- Eleven community members now serve on CAP. There are currently two vacancies on CAP. The CAP membership sub-committee has identified three potential new members. Interviews will be held in the new year with final approval of recommended members by CAP
- Four regular meetings were held in 2015. These included:
  - Metro Vancouver Interim Sulphur Dioxide Objectives (Feb 2015)
  - BC Fuel Market & Confederation Park Update (May, 2015)
  - Economics of the Refinery: Taxes & Community Benefit (Sept 2015)
  - Emergency Notification & Preparedness (Nov Public Meeting)

#### 5. **Special Presentation (See Attachment Two)**

Mike Ward, CCL Downstream Emergency Response Safety Security Lead provided an overview of protocols and processes in place at the Refinery.

Catherine also reported on behalf of the CAP Emergency Notification Sub-Committee that the City of Burnaby's Emergency Preparedness Manager declined the sub-committee's request to present on Burnaby's handling of emergencies after they are reported. The CAP Emergency Notification subcommittee intends to follow up with the City. In addition members of the public interested in the issue can contact the City of Burnaby to express concerns.

Comments and questions about the presentation:

**Q4:** How easy is it to stop the Westcoast Express if there is a problem at the refinery that could impact the train?

A4: Chevron calls a direct number that alerts the control of the situation. They then alert the train and it comes to an almost immediate stop

**Q5:** How many Marsec level one, two, and three events happened in the last year?

A5: There was one level one event during the turnaround. There were no level two or three events.

**Q6:** Why can't Chevron send emails to residents if they give them their email addresses to notify them of an emergency at the plant?

A6: The City of Burnaby has the regulatory responsibility to notify residents of emergencies and the action to take whether to stay in place or to evacuate.

**Q7:** I live on Madison and am curious about the perimeter fencing and security. Do you review security regularly?

A7: Yes, there are cameras on all gates, random patrols walk the perimeter. Also conduct yearly reviews of refinery security plan.

## **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.

**Q8:** What is happening in park by stairs?

A8: Slope repair work is still occurring. The refinery has an agreement with the City of Burnaby for the fencing to remain in place until 2016 to allow the vegetation to regrow.

**Q9:** Given the recent events in Paris, what steps is Chevron taking moving forward to ensure a secure perimeter?

A9: Chevron completes a security audit every three years that includes threat assessments. We work with CSIS, RCMP and security organizations along the West Coast to assess threats to the refinery. Chevron recently upgraded the gates, cameras and lights. Security personnel walk the perimeter weekly. Recently Chevron approved increased funding for perimeter fencing at the refinery.

**Q10:** What actions does the refinery take during water restrictions?

A10: Chevron uses cooling towers, which recirculate some water and are more efficient than once-through cooling systems used at other refineries. During the dry spell of 2015 Chevron increased the cooling tower tolerance (conductivity set-point), which increases wear on pipes but saved approximately 1.4 million gallons of water. Chevron also recycles water in the Crude unit de-salter, which saves about 48,000 cubic meters of water per year. Chevron has a water conservation

working group worldwide to look at strategies to conserve water. The Burnaby refinery participates in this.

A10a: The fire training group stops using water in training exercises during summer drought.

**Q11:** Does the City of Burnaby monitor water use and does Chevron pay for water it uses?

A11: Yes, Chevron's water usage is monitored and yes Chevron pays for the water it uses.

## **7. 2016 CAP Agenda Planning**

CAP and the public suggested that the following topics being considered for discussion in 2016 beyond the usual updates and discussion topics:

- Presentation on the truck loading rack
- Buffer zone
- Rainbow Creek health and status
- Water conservation measures at the refinery; how water is used at refinery
- Review of pipe locations to and from refinery including waste and water
- Noise issues in the 4300 and 4400 Cambridge area
- Assessment of CAP effectiveness in terms of its role to liaison with community including sharing information and gathering information

**ADJOURNMENT:** Meeting adjourned at 9 pm