

**Minutes of the Chevron Burnaby Refinery
Community Advisory Panel Meeting
Thursday, September 13, 2012**

7 – 9 pm at the Confederation Seniors Centre

PRESENT

Rob McLean, Al Mytkowicz, Rob Firkins, Pat Connelly, Art Quan, Bonnie Hayward, Maziar Kazemi

Chevron representatives:

Jill Donnelly, Health Environment & Safety Manager; Jim Gable, Refinery Manager; Ray Lord, Public & Govt. Affairs Manager, Joanne Jamieson, Community Relations Representative.

Metro Vancouver Representatives:

Larry Avanthay, Regulatory Representative, Metro Vancouver
Darrell Wakelin, Regulatory Representative, Metro Vancouver

Facilitator:

Catherine Rockandel, Rockandel & Associates

Regrets:

Eileen Luongo, Ian Lacoursiere, Kathy Mezei, Kathy Curran

Guest:

Darren Silcox, Bartlett Tree Experts

CAP BUSINESS

1. Opening Remarks

- Catherine Rockandel welcomed CAP members and provided an overview of the agenda. She welcomed guest Darren Silcox, Local Manager of Bartlett Tree Experts.

4. CAP Q & A.... NOTE....DUE TO TIME & AVAILABILITY CONSTRAINTS of our guest Darren Silcox, the CAP Q&A question regarding the status of the Area 1 Perimeter Fenceline Tree work was brought forward on the agenda.

a. Area One Fence Line Tree Work

- Ray Lord provided a brief review of the refinery's vegetation management plan and recent tree work undertaken along the Area 1 fenceline. The work completed to date has sought to begin restoring the condition of several mature trees while attempting to meet the various concerns of neighbours to enhance view corridors while also providing security and aesthetic screening of the tank farm. He stated that the initial phase of tree work has been significantly completed, including high priority tree work along the Area 1 tank farm perimeter fence between Willingdon and Madison and that ongoing maintenance work will be undertaken every 3-5 years going forward. In addition to the recently completed tree work, landscaping crews will be planting low-lying evergreen shrubs this fall to improve the natural screening of the refinery parking lots, contractor trailers and other facilities.

- Darren Silcox provided more details of the tree work that was conducted at Chevron. He reiterated that the landscaping and plantings for the area near the Rosser street gate had been thoroughly planned and that with regular maintenance the original goal of combining screening of tanks and other structures with appropriate trees and other shrubs has been achieved. Other areas like the stand of trees near the Madison gate now have large mature evergreen and deciduous trees that have been present for many decades. The tree work has considered ways to remove damaged branches and dead limbs, reduce overall width and maintain a natural looking crown where possible without topping the trees as that may lead to long term health and aesthetic issues with the large fir trees. Overall approximately 8-10% was trimmed off the trees.

Q: How was 8-10% taken off the trees?

A: It was trimmed from the sides and we attempted to open up view corridors as much as possible.

- Ray Lord reiterated Chevron's desire to be sensitive to the wishes of neighbours in terms of this long-term approach to tree management and that he would be pleased to meet with any interested neighbours to review the plans and to answer further questions

NOTE: Darren Silcox from Bartlett was then excused and the meeting returned to the regular agenda.

2. Chevron Updates

a. General Refinery Operations - Jim Gable

- Jim reported that operations have been steady and stable since our last meeting.
- On July 16th the FCC tripped due to an instrumentation malfunction. The unit was safely restarted within 24 hours.
- On Aug. 2nd there was an odor incident at the tank farm. There were two community complaints and an employee was taken to hospital for examination complaining of discomfort. He was subsequently released and has returned to work.
- Our ongoing tank maintenance program continues. Tank 1001 in Area 2 was completed on June 25th. Work on tank 116 in Area 1 was completed on July 26th and Tank 119 is nearing completion. Upcoming work on Tank 152 and Tank 81 is scheduled for this fall. A number of measures have been put in place to reduce noise during this work including using sound baffles and scheduling noisier activities to daytime shifts only. By the end of this year we anticipate being on schedule to complete a long-standing commitment to complete the tank maintenance plan in compliance with the CCME's (Council of Canadian Ministers of the Environment) Guidelines for the operation of above ground storage tanks.
- Crude supply – TMPL pipeline apportionment continues. Up to 6000 barrels per day of crude are now arriving via 18-20 trucks per day. The crude by rail facility is on schedule to begin operation early next year.

Questions about General Refinery Operations include:

Q1: Do the sharp horns that we sometimes hear in the neighbourhood have different meanings? Sometimes they are a sustained blast and other times a short blast.

A1: On Friday at noon we have a fire alarm horn test at Area 1. The horn is for internal alarm purposes only and is not a community alarm. The other alarm testing you might hear could be coming from the tank truck loading rack where fire safety system alarms are also tested on a periodic basis.

Q2. How would we know if they weren't a test?

A2. The horns would be continuous.

Q3: I what area of the refinery did the employee encounter the odor issue?

A3: In Area 1 near the asphalt loading rack.

Q4: What area of the community did the public complaints about odor come from?

A4: The two odour complaints received originated in the 4300-block Cambridge.

Q5: How often do you get employees hospitalized?

A5. Very infrequently, sometimes employees may get a shortness of breath or other issues associated with physical exertion. If it is hot it can be heatstroke, but this is very rare. We've gone over five years without a day away from work injury.

Q6. During tank maintenance it sounded like jack hammering inside the tank. Was that related to the cleaning of the tanks?

A6. This could have been sheet metal work on the tank floor or walls, as impact tools and grinders can resonate inside the tanks.

b. Refinery Priority Destination Designation - Ray Lord

- As you have probably heard Chevron has applied to the National Energy Board (NEB) for Priority Destination Designation. The TMPL pipeline expansion is getting a lot of public and media attention; however Chevron's Priority Destination Designation application to the NEB is a completely separate issue. As we've discussed at previous CAP meetings, the issue is related to oversubscription on the existing pipeline and our difficulty getting the crude we need and not having an economic alternative for crude supply to the refinery. Chevron has undertaken a broad outreach effort to inform stakeholders including CAP, and elected officials at all levels of Govt, etc about the application. A hearing is now set for mid January and the decision on our application is expected sometime during the first half of 2013.

Questions about Refinery Priority Destination Designation include:

Q1. To what extent are the finished product shipments treated the same way as crude oil as a result of the allocations that happened? Has this created any product shortages in the lower mainland?

A1: The apportionment is not related to any specific product but rather space or capacity in the pipeline. Until very recently, we have been reliant on the pipeline for our entire crude supply. Other pipeline users who ship crude or other products via the pipeline, and who may have alternative methods to secure those supplies can nominate pipeline space based on their operational capacity as space allocation is based on a facility's nameplate capacity. In our case, we have seen apportionment of up to 75% in recent months

Q2. Is there an option for Chevron to bid on long-term contracts?

A2. Yes and in fact we have bid on long-term contracts in the past. Any expansion of the Trans Mountain system is at least five or six years out. We're continuing to examine our options for long-term crude supply and a commitment of volume remains one of those options. A long-term commitment is useless if Burnaby cannot secure its access to crude during the interim period. Therefore, our application for Priority Destination Designation will receive the focus of our attention.

Q3. What do you expect would be the impacts associated with the building of the pipeline? Could this further disrupt the supply?

A3: There should be no risk of disruption to our supply during the building of an expanded pipeline should it proceed. Again this is why we have applied for priority designation.

Q4: What percentage of pipeline capacity is current and how much is spot?

A4: 300,000 barrels per day is the current pipeline capacity of which 80,000 is directed to Kinder Morgan's Westridge dock (with 50,000 bpd of that allocated to firm shippers and 30,000 available to other marine shippers) while the remainder of 220,000 bpd is available to spot shippers.

Q5: Does Chevron have the capacity to store more crude oil on site?

A5: No. Chevron has three storage tanks of 100,000 barrels capacity and given our location limited footprint and with no plans for expansion, we are not in a position to contemplate more crude storage on the site.

c. Area 2 Seep – Jill Donnelly

- Jill reported that Chevron is now submitting quarterly reports as part of the MOE's (Ministry of Environment) ongoing oversight of our seep mitigation efforts.
- As described at our previous meeting, Chevron has doubled up the absorbent clay barrier at the foreshore. We continue to sample and monitor the area. There has been little to no sheen observed in recent months.
- A new, more robust boom was recently installed to accommodate the increased wave action we've been seeing due to summer recreational boat traffic in the area.
- We have sourced data on background conditions in Burrard inlet for shellfish and can use that data as a benchmark for any risk assessments to determine if there are potential effects on shellfish.
- Construction on the new refinery north sewer continues.

Questions about Area 2 Seep include:

Q1: Any change in the volume of hydrocarbon in water from wells?

A1: The volume of hydrocarbon is mixed with water in the extraction wells making it difficult to quantify because the water table is subject to variations at different times of year. The extraction system has also been expanded since the early stages of our response.

Q2: Can't you measure the quantity of hydrocarbons in the well water?

A2: We measure the ability of the wells to draw groundwater from the water table.

Q3: Any noticeable trends increase or decrease in amount of hydrocarbons?

A3: Because of seasonal variations in the water table trends are neither predictable nor consistent.

Q4: What happens to hydrocarbons that are captured in the water table?

A4: Recovered oil (hydrocarbon) is returned to the refinery for processing.

Q5: Why does it matter if the water table rises or falls?

A5: The effectiveness of measuring hydrocarbons is affected by differences in the level of the water table. As the contamination exists in soil below the surface, the water table level will determine how much contamination is picked up from the soil and transported.

Q6: Could the water level be below the wells you have drilled?

A6: In that case it would likely be below the level of the seep material itself. The wells have been drilled to a variety of depths that have been designed to collect groundwater within the area of the seep.

Q7: Can you see any oil at the beach?

A7: No, we haven't seen any sheen in recent months.

d. Site Remediation Status Update Summary - Jill Donnelly (see attachment 1)

- Jill provided CAP with the regular Status Summary. The most recent perimeter monitoring sampling has been completed and sent to the MOE.
- Chevron has a system that injects air into the wells to help remediation. Test results indicate that these wells have gone dry.

3. Refinery Flaring Presentation – Jill Donnelly (see attachment 2)

- CAP members had identified Flaring as high priority for discussion in 2012. Jill provided an overview presentation on Flaring 101 to building understanding about the Flaring process.

Questions about flaring include:

Q1. Is there a way to capture energy wasted from the flare?

A1. No, not really in the sense you're describing. There is not enough energy in the flare flame itself to capture and ideally we try to keep all the gas in the processing equipment so

that it can be turned into fuel products for our customers. We need to keep ensuring that the vessels are not releasing gas to the flare.

Q2: Why are we seeing a yellow flame during operations? It is my understanding that all valves should be closed. This would suggest to me that some valves are leaking and that would mean you are losing money.

A2: We are regularly checking the vessels for leaks, however given the large number of valves and other equipment tied into the flare it is virtually impossible to have zero leakage and there will always be some loss to the flare.

Q3: What are some ways Chevron might reduce yellow flame?

A3: Optimizing the purge gas flow is one of the ways we can do this. Minimizing any valves that are passing is another way.

Q4: How many days per year do you exceed Metro Vancouver restrictions for opacity and emissions?

A4: Rarely; it's hard to think of a time when that has occurred. We are required, however to notify Metro Vancouver if we exceed a certain flow level – and that happens maybe four times a year or so.

4. CAP Q & A

a. Area One Fence Line Tree Work – see *item addressed at start of the meeting*

b. Emergency Notification Status Update – Ray Lord

- There is not much new to report. Chevron continues to be in touch with the City of Burnaby and technology vendors on the proposal we provided for emergency notification in North Burnaby. The City is analyzing and actively considering the proposal but there has been no decision to date. As the public discussion about pipeline infrastructure in Burnaby continues there may be a heightened level of interest by the City in such a system being implemented.

c. Pipeline Proposals – Ray Lord

- Chevron continues to monitor the Kinder Morgan Transmountain pipeline expansion debate. There is nothing new from Chevron's perspective to report at this time.

d. Metro Vancouver Update – Larry Avanthay

- Burrard Inlet Area Local Air Quality Study (BIALAQS): The report has been completed and the final document is expected to go to the Environment and Parks Committee in October and to the Board in October or November. The study will be a public document, once the Board approves it. The study looked at air quality monitoring data around Burrard Inlet to determine if there are any patterns or differences vs. general air quality in the region. An excellent video of the studies objectives is available on the Metro Vancouver website (Metro Vancouver/Media Room/Video/Search/Burrard Inlet Air)

- 2011 Lower Fraser Valley Air Quality Monitoring Report Summary: Report provides an up-to-date evaluation of air quality in our region. Document is available on-line together with historic annual reports (Metro Vancouver/Services/Air Quality/Air Quality Monitoring).
- Air Quality Advisory: Media Release was issued on August 17, 2012 for an Air Quality Advisory for the eastern parts of Metro Vancouver and the Fraser Valley in anticipation of high concentrations of ground-level ozone expected to occur in the afternoon. The Advisory was cancelled the following day due to improvements in air quality because of a change in weather conditions.
- Chevron SOx Curtailment Events (SCE): Two events were triggered due to elevated SO₂ readings at the Capitol Hill ambient air monitoring station (T23). The first SCE was triggered on Saturday August 4th (17 minute duration) and the second on August 17th (3 minute duration). The Chevron permit has a trigger point at which Chevron is required to take measures to reduce SOx emission from the facility. This is typically accomplished by reducing the SOx set-point on the FCCU, the largest point source of SO₂ at the facility. Based on the week-end forecast of continued poor dispersion Chevron took proactive voluntary measures to reduce their SOx set-point from Friday till Sunday.

New Business: CAP Public Meeting Planning

- The original goal of the annual neighbourhood CAP meeting was to invite the local community to observe a CAP meeting and to learn more about it, to offer an opportunity for dialogue and to participate in a general Q&A session. The group felt there may be more interest this year because of the high profile pipeline issues and media coverage of Chevron's Priority Destination application and the future of the refinery.
- Promotion of the meetings will be included as an insert in the Neighbourhood Newsletter sent to over 8,000 local homes and business and posted notices distributed to public facilities in the area. The focus of promotion is on North Burnaby neighbourhoods surrounding the refinery from Boundary Road, south to Parker Street and east to Fell Avenue.
- CAP brainstormed ideas on content for the meeting: focus on what is behind the gate; explain how refinery operations impact the neighbourhood; focus on specific neighbourhood impact issues; identify positives and negatives if refinery shuts down; focus on positive stories that people can relate to such as the priority designation application, information on flaring, or to build understanding about odor management, pipeline expansion and possible impacts on the refinery.
- CAP agreed that the format should be an abbreviated CAP meeting that includes:
 - Usual updates
 - Feature presentation on crude supply and the value of Chevron to the community
 - Public Q&A
 - Brainstorm priority issues for planning discussions in 2013

Next CAP Meeting: Neighbourhood CAP meeting Wednesday, November 21, 2012