

THE BURNABY REFINERY'S

Neighbourhood News

A NEWSLETTER FOR OUR NEIGHBOURS
SPRING 2015 - ISSUE 46



As part of BC's Climate Action Plan,
the provincial government is taking
steps to reduce greenhouse gas
(GHG) emissions

Working to
**Reduce
Greenhouse
Gas
Emissions**



In 2010, the Renewable and Low Carbon Fuel Requirements Regulation came into force. This policy is designed to reduce our reliance on non-renewable fuels as well as decrease the environmental impact of transportation fuels.

“Transportation fuel regulation is a significant part of the Climate Action Plan” said Dave Schick, the refinery’s manager of policy, government and public affairs. “The transportation fuel target is to reduce carbon intensity by 10 per cent by 2020. To do this, we have changed the composition of our fuels. For example, there has to be five per cent ethanol in the gasoline pool and four per cent biomass-based diesel in the diesel pool.

Because the products the refinery sells must be formulated to meet the requirements, many of the refinery’s capital expenditures have their roots in changing environmental regulations.

These include production of lower carbon fuels, complying with new emissions regulations and meeting more stringent fuel specifications. For example, Chevron is modernizing its Hatch Point Fuel Terminal on Vancouver Island by adding ethanol blending capability to lower GHGs and a vapour recovery unit at the tank truck loading rack to improve emissions performance. There is also a refinery project underway to produce 10 ppm sulphur gasoline to meet an upcoming more stringent requirement than the current 30 ppm level.

“These changes are fundamental to our capital planning process and guide how we change and modify the refinery,” said Dave. “Meeting environmental regulations requires significant resources.”

The refinery has modified its blending capacity to manage the new products it makes. It also strives to source reliable,

cost-effective products in order to be able to create lower carbon intensity fuel.

“We’re working hard to meet all the policy goals and reduce the impacts of climate change,” said Dave. “Lowering the carbon intensity of fuels is a part of the refinery’s compliance obligation. Refining locally ensures that both fuel production and the finished products meet the rigorous environmental standards in place for Canadian industry.”

The provincial government is currently reviewing its policy to determine what moves to take going forward. One of the intentions of the regulation is to encourage alternative fuel technologies. Consumer adoption of these new technologies such as electric cars or natural gas powered vehicles will play a role in meeting these public policy goals.”

Manager's Message

Steve Parker, General Manager

I am proud to report that our recent turnaround, which was the largest in our plant's history, was done safely, reliably and on schedule. Indeed, Chevron's Global Manufacturing President visited the refinery recently and noted that this particular shutdown period was the best executed turnaround in the company's system. With the exception of an increase in road traffic in the areas immediately surrounding the facility, there was very little disruption to our neighbours; thank you for your patience. With this work successfully complete, we are back up and running and providing British Columbians with a reliable supply of locally produced transportation fuels. There are no major events planned for the balance of the year; our next turnaround will be a small one next February.

We strive to be a good neighbour and have an ongoing commitment to make as little impact on you as possible. As you will see from this issue's Tech Talk article, this includes not causing nuisance odours. This is an expectation that is also built into our environmental air permit. We continue to patrol our perimeter to make sure no fugitive emissions are escaping and we monitor the performance of equipment such as our vapour recovery units and tank seals which are designed to contain odours to ensure they are working effectively. If you ever do have concerns, please do not hesitate to contact us... every odour complaint is investigated.

Our Safety Matters article looks at how the refinery handles a very topical issue: rail car safety. In light of recent incidents in other parts of North America, the Community Advisory Panel (CAP) raised this topic and we want to continue to work with the community to assure you that our rail operations are safely managed. CAP did an onsite inspection of our rail facilities last year and was walked through our operations. Changes are coming to ensure rail safety including reductions in allowable speeds in built-up areas and improvements to rail car designs. We will continue to keep CAP up to date on these developments.

With summer quickly approaching I am sure many neighbours will be out travelling... I wish you safe and enjoyable journeys.



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Safety Matters

Rail Car Safety

The Burnaby Refinery receives shipments of crude oil a number of ways: by pipeline; by truck; and, more recently, by rail. Between five and 12 rail cars loaded with product that will be turned into gasoline and diesel arrive daily at our rail rack. The highest safety standards are followed to ensure there are no incidents with these deliveries.

Federal Regulations

As a result of lessons learned from recent events, federal rules regarding rail transportation are tightening. Cars used to transport flammable liquids will need to meet enhanced protection standards that significantly reduce the risk of product loss should the cars be involved in an incident. The new Transport Canada standards will require rail cars to have thicker steel, full head shield protection, a jacket with thermal protection, top fitting protection, and new bottom outlet requirements. These

regulations are being phased in over the next two to 10 years.

Refinery Protocols

“The refinery has a dedicated transportation group to monitor safety compliance,” said Supply Manager Elim Yeoh. “These people are rail experts and they have close relationships with their counterparts with the rail company from which we lease our cars.”

The rail cars that Chevron leases are inspected every time they arrive or leave the refinery. Should an issue be detected, maintenance specialists are available to attend to it quickly.

Safety practices are also in place when the crude is unloaded from the rail cars. Dedicated operators are skillfully trained to offload product. These workers ensure there are no

deformations to the rail cars and that no seals are broken. Should something require attention, the operators follow written procedures on how to manage the situation and who to contact.

“There’s a lot of documentation for the safe unloading of product,” said Elim, “and by using dedicated crews we are ensuring we have seamless deliveries. We also apply our loss prevention analysis tools to this area which has been helpful in building safety governance around rail cars.”

Safety Design Features

The rail rack itself has been designed with additional buffers to hold any unexpected product release. A containment system would prevent product from entering Burrard Inlet or contaminating soil. The refinery’s onsite emergency response team would manage such an incident according to Chevron’s stringent policies.



Tech Talk Odour Management at the Refinery



Chevron's Odour Management Plan

Staff at the Burnaby Refinery take odour complaints seriously. Each and every complaint is investigated. The refinery has many processes in place to minimize any impact on the surrounding community. The intent is to reduce, if not eliminate, the effects of odours - and any excessive noise for that matter. "We have an Odour Management Plan, a formal, documented plan that was developed several years ago with the help of an outside consultant," said environmental specialist Vicki Bowman. "It is a comprehensive document that includes all the potential odour sources on our site. It outlines how complaints are to be looked at and how investigations are to be conducted. It also includes steps for tracking and mitigation of odours."

The Odour Management Plan is referred to whenever new work is being planned.

"We routinely assess the risk of odour generation of every job that could have that potential," said Vicki. "We identify any risks and have plans in place to

mitigate odours before they have a chance to happen. We also conduct routine odour tours on and off site - especially if a particular type of work is occurring that could possibly generate odours."

Odour Mitigation Built into Designs

The refinery's efforts to contain odours begin at the design stage for new equipment. As an example, tank seals made from a flexible urethane vapour barrier material form a ring around the inside perimeter of the roof on each floating roof tank. Depending on the volatility of the product a tank contains, a secondary seal may be required. The primary seal keeps most of the vapours contained, while the secondary seal is there for an extra level of protection.

The refinery follows the guidelines established by the Canadian Council of Ministers of the Environment for tanks and our air permit requires compliance with these rules. Regular, routine tank seal inspections are required to measure any gaps between a tank wall and its seals to ensure these are within the

required specifications.

Additionally, cone roof tanks which contain potentially odourous products also are equipped with an odour filter.

The refinery also has odour control mechanisms built into other areas of the facility such as the waste water treatment plant.

All Complaints are Investigated

Regardless of the time of day or night or what else is going on at the refinery, all odour complaints are investigated as soon as it is practical to do so.

"We've made great steps forward in improving odour management and we want to continue to improve," said Vicki. "If you do have concerns, please let us know and we will look into them."

The refinery welcomes your calls and feedback. If you have any comments or concerns, please do not hesitate to call our Community Contact Line: 604-257-4040.

Across the Fence

Confederation Park

Pipeline Maintenance

The refinery is conducting routine maintenance and evaluation of the underground pipeline that runs along its right of way in Confederation Park this summer. This pipeline connects the manufacturing part of the facility with its distribution area.

We will be conducting some limited brush clearing in order to gain access to parts of the pipeline. While the work is ongoing, access to some of the trails will be restricted and we apologize for any inconvenience this may cause.

Turnaround Success

The largest shutdown/turnaround period in the refinery's history this past February through April was one of its most successful. The event, which was two years in the planning, was done safely, reliably, and on schedule.

"There were zero recordable injuries, zero environmental incidents, zero leaks upon startup, and all of the work was completed on time," said Gord Bruce, who was the event leader. "This turnaround was a huge endeavour that required 140,000 direct field labour hours. We worked on seven different units, installed a new third-stage separator in our fluid catalytic cracker, and made many other upgrades to ensure the refinery will run safely and reliably until our next planned turnaround."

Much of the equipment at the refinery is constantly running and must be taken out of service for inspections and for maintenance. Shutting the plant down allows for workers to take a look inside the equipment to ensure it is operating properly. To do this, the refinery brings in extra hands from across the Chevron family as well as many specialized contractors.

All those extra bodies make an impact on the neighbourhood, with additional traffic and parking.

"We made efforts to minimize our effects on the community as much as possible," said Gord. "We'd really like to thank everyone for their patience and understanding."

The next shutdown period for the refinery will be a much smaller one early next spring.

Pollen is Fallin'

Achoo! Yes, it's that time of year. Pollen season leads to a buildup of yellow particles on your car and around your house. Those particles have not arrived from the refinery but have blown off your neighbouring trees and plants. If you would like to know more about which plant may be responsible, check out the Weather Network's online pollen forecast: www.theweathernetwork.com/outdoors/pollen/canada/british-columbia/vancouver. It will tell you the current sources of pollen and their estimated concentration around Metro Vancouver.



During this turnaround, thousands of pounds of equipment (both new and old) were added and removed from the FCC structure, such as the removal of some old cyclones shown here. Each of these crane lifts required detailed planning to ensure that they were completed safely.

Community Corner



Party Time Just Around the Corner: Hats Off Day 2015

Are you ready to party, Heights Neighbours!?! Head to Hastings Street on Saturday, June 6 between 9:30am and 4pm for this year's Hats Off Day featuring the traditional parade, vintage car show and Burnaby's best street festival.

We love meeting our neighbours at your local town pump... the folks at the station at Hastings and Willingdon look forward to entertaining you with music, kids' activities and giveaways. Hope to see you there!



Giro di Burnaby Takes Over the Hood July 16

Tires hiss, cowbells clang, and crowds cheer... summer's coming and so is the Giro di Burnaby. Athletic and promotional circuits around the world are sitting up and noticing the race that goes right through our neighbourhood with the action set for July 16 beginning at about 6pm. The event is renowned for the quality of its course as well as the generous prizes and the unique atmosphere courtesy of the Heights neighbourhood.

Check out the event's website (girodiburnaby.com) for information on the best places to view all the action as well as details on street closures.



Ready, Set, Race!

Chevron was proud to be a sponsor of this year's BMO Vancouver Marathon. It was our first time participating in the event and we loved being part of the excitement which included a full 42.2-kilometre marathon, a half marathon, an 8-km run, a kids' run, an expo, and a number of races within the race. Congratulations to all Heights' residences who took the challenge and we hope to see you back at the starting line again next year.

Community Corner



Movie in the Park set for August 30

The magical work of Disney Studios is coming to a park near you. Mark your calendar today for our annual Movie in the Park event on Sunday, August 30. The film this year is the award-winning Big Hero 6. We will have lots more information about the movie and all the other entertainment planned for the evening in the summer issue of Neighbourhood News.



Looking Back Chevron Burnaby Refinery: Loading Asphalt, 1938



Community Contact Line

(604) 257-4040

Chevron's Burnaby Refinery welcomes your calls and feedback. If you have any comments or concerns, please do not hesitate to call our Community Contact Line: 604-257-4040.

This line is staffed on weekdays between 8 am and 4:30 pm. Your call will be directed to the most appropriate person who can respond quickly. In the event of an emergency, or significant maintenance work underway that may contribute to unusual operating conditions, information and regular updates for the public are made available.

If you are calling after hours or on a weekend, please follow the paging instructions. Your call will be forwarded to our on-duty shift supervisors. If you would like to report an odour or if you notice anything that you think is unusual, please let us know. Your calls are very important to us and we will respond as quickly as possible.

To contact the Metro Vancouver air quality officer **604-436-6777**

For the refinery website, visit **www.chevron.ca/operations/refining**

For information about the Chevron/ North Burnaby Community Advisory Panel, visit **www.chevroncap.com**



Neighbourhood News is a quarterly newsletter produced by Chevron's Burnaby Refinery for residents of the Heights, Capitol Hill and surrounding areas of North Burnaby.

We invite your comments, questions or suggestions for future articles.

Please contact us at Neighbourhood News, Chevron Canada Limited, Burnaby Refinery, 355 North Willingdon Avenue, Burnaby, BC, V5C 1X4.

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