

# Neighbourhood News

WINTER 13

A NEWSLETTER FOR OUR NEIGHBOURS



## Refinery to Receive Crude Oil by Rail Car



### Refinery to Begin Receiving Crude Oil by Rail Car

Ensuring a reliable, cost effective supply of crude oil to the refinery continues to be a top priority for Chevron. Efforts to achieve that goal have included the addition of crude shipments by tank truck that began last spring and an application to the National Energy Board for Priority Destination Designation on the Trans Mountain Pipeline System.

### Crude Oil Delivery Methods

The Burnaby Refinery was designed to get 100% of its crude supply through the Trans Mountain Pipeline system. But as demand for space on that pipeline from other shippers has increased, the refinery has had to find alternative sources for the crude oil it needs to operate efficiently.

Some 4,000 barrels are currently being safely delivered to the refinery every day by tank truck. But recognizing that

trucking alone could not provide enough supplemental crude feed stock, the refinery has also secured a fleet of rail cars that will carry crude oil directly to the refinery from producers in Alberta and Saskatchewan.

The refinery is on track to begin accepting rail car delivery of crude oil by the second quarter of this year according to its Business Optimization Specialist Dave Merrick. "We have retrofitted an existing rail-car loading

rack and have converted it to be ready for shipments of crude oil," he said. "Once completed, we'll be able to receive up to 8,000 barrels a day of crude by rail."

### New Infrastructure Being Built

Engineering Manager Eric Butler spoke of the new infrastructure that has been created at the rail-car loading rack including new piping which will tie into an existing

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## Manager's Message

JIM GABLE  
GENERAL MANAGER



As demand from a growing number of customers using the Trans Mountain Pipeline, the primary source of crude oil for the refinery increases, Chevron has had to look for alternative sources to meet our ongoing production requirements. To that end, we will soon begin accepting some of our crude supply via rail car. We're building versatile new infrastructure that will meet all of Chevron's rigorous safety standards, as you can read in this issue's cover story.

Safety is our paramount value and that is demonstrated with the transportation of products in and out of the refinery

via our marine loading wharf. Burrard Inlet is a spectacular setting and it's also a high-traffic area for marine vessels going about their business on a daily basis. Chevron has an excellent marine safety record, beginning with our own wharf operations and extending to the safety standards that are required of the ships and barges that use our facilities.

I have always admired the spirit of innovation among our employees at the Burnaby Refinery. One of the ways we've seen that

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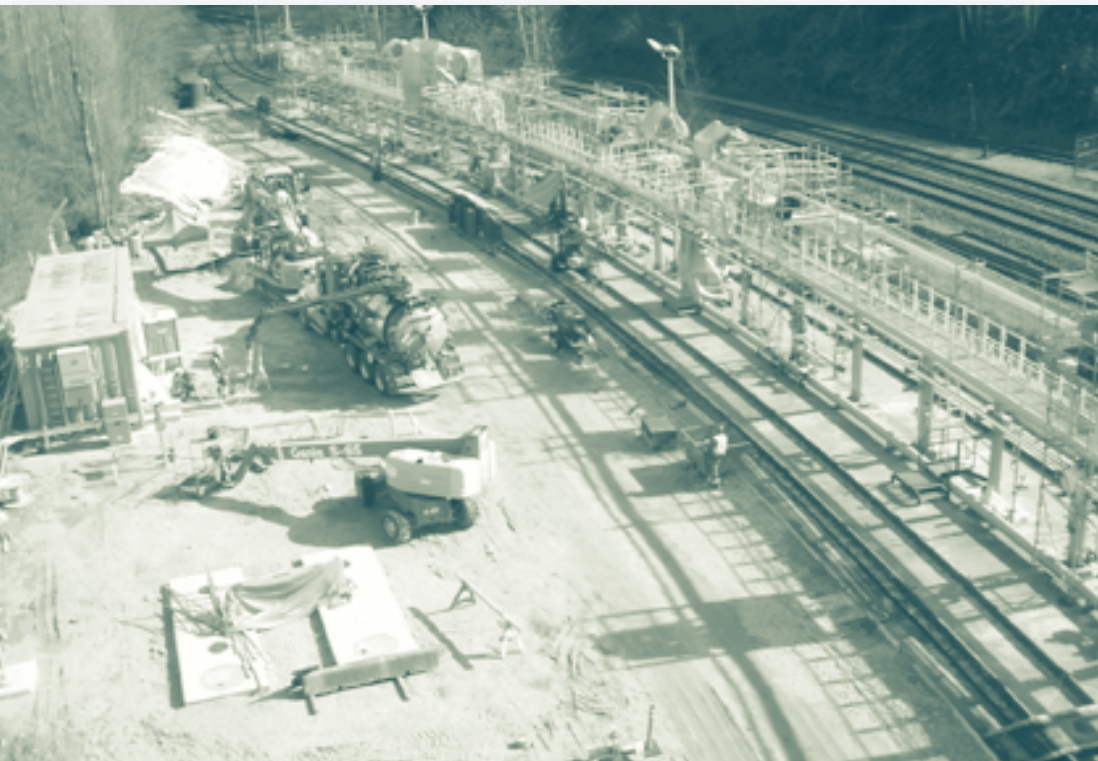
THIS DOCUMENT CONTAINS IMPORTANT INFORMATION.  
PLEASE HAVE SOMEONE TRANSLATE IT FOR YOU.

這份文件包含重要資料，請找人為您翻譯。

이 문서에는 중요한 정보가 담겨있습니다.  
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ਇਸ ਦਸਤਾਵੇਜ਼ ਵਿਚ ਮਹੱਤਵਪੂਰਨ ਜਾਣਕਾਰੀ ਹੈ। ਕਿਰਪਾ  
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CRUDE BY RAIL FACILITY CONSTRUCTION IS NOW NEARING COMPLETION

#### MANAGER'S MESSAGE CONTINUED

creativity at work is in the new techniques we now use to conduct inspections of our vertical columns. Highly trained professionals carefully rappel up and down tall, difficult to access structures as they carry out their high-flying work. It's a quicker and more cost-effective solution than using scaffolding and it is fascinating to watch!

In other parts of this issue you will get an update on the soon to start construction of our new fire hall that will improve the response times of our on-site fire fighting teams.

Finally, it is with mixed emotions that I let you know this will be my last message as the Burnaby Refinery's manager. I recently accepted a new assignment within Chevron at its headquarters in California, and while I am excited about the opportunities ahead, I'm certainly going to miss the people who have made my family's stay in Canada so memorable. I am sure you will give the plant's new manager, Steve Parker, as warm a welcome as you gave me.

Best wishes for the future.

#### CRUDE OIL BY RAIL CAR

line as well as new pumps and sumps to offload the product. Emission controls mean no crude oil vapours will be released into the atmosphere during the off-loading procedure.

"We've created a spill protection system, including underground containment tanks," said Eric. "In the unlikely event of a spill or leak, these tanks will ensure all the product is contained on site. We've also made some electrical improvements to an existing small building that will be used by operators. It will be equipped with the very latest instrumentation technology for remote monitoring of the new facilities."

The new rail car delivery of crude oil should have no effect on the neighbourhood as there will be no increase in noise, traffic or odours.

# Safety at the Refinery



#### Ensuring Safe Marine Loading Operations

Safety is a top priority at the Burnaby refinery - whether on land or on sea. The refinery both imports and exports products using vessels that ply the waters of Burrard Inlet and we take our responsibility to protecting our marine environment very seriously.

#### Safety on the Water

A variety of vessels use the refinery wharf on a regular basis... over half the fuel the refinery processes leaves the facility by ship or barge.

"They carry everything we make: different grades of gasoline; diesel; jet fuel; fuel oil; and crude," said Operations Advisor Brian Robinson. "Vessel destinations are primarily on Vancouver Island; some also go to Washington and California. All barges, with capacities of between 25,000 to 100,000 barrels, and ships, that can hold approximately 250,000 barrels, all have to be equipped with double-hulls which is a corporate requirement for shipment of all Chevron products."

Transport Canada develops and enforces regulations related to training, testing and certifying marine personnel to ensure the safe operation of all marine vessels in Canada, including those that use Burrard Inlet. Certified pilots are always on board ships between the west coast and the refinery wharf to assist captains with navigation through local waters.

The area is further protected by Port Metro Vancouver which not only controls inbound and outbound traffic, but also provides continuous marine surveillance using patrol

boats, closed circuit security systems, and land patrols. Vessels are assisted by tug boats that escort them at all times.

#### Safety at the Wharf

The refinery wharf's spill prevention capabilities are state of the art and operators who work there are fully trained and qualified as third and fourth class steam engineers.

Mooring dolphins, fixed points along the wharf where vessels tie up, are specially designed to secure the ships and barges. Spill booms are permanently placed around the wharf and enclosed around any vessels transporting distillate products. There is a Marine vapour recovery unit to reduce potential odour emissions. In the unlikely event of a spill, the refinery's in-house emergency response team and resources from West Coast Marine Response Corporation (a local marine spill response organization) would be on the scene immediately.

"We have 100 per cent spill containment at the wharf," ensured Brian. "Even the rainwater that lands on the wharf deck is pumped ashore for treatment to make sure there is no contamination of the marine ecosystem. And the shoreline adjacent to the wharf is completely protected with booms at all times."

The wharf also has full fire-fighting capabilities with hydrants at various locations and elevations. Emergency shutdown activators are located along the dock. Life preservers are readily available in case of a man-overboard situation. The wharf control room is elevated and offers crews a full view of all vessel deck surfaces at all times.



# Tech Talk

UNDERSTANDING WHAT  
GOES ON AT THE REFINERY

## Reaching New Heights with Column Inspections

The Burnaby Refinery is unique in many ways, including the fact that it features many vertically engineered operating structures due to its hillside location and limited space. Inspired by work done in other refineries as well as in power plants and even on roller coasters at Disneyland, the refinery has recently instituted an innovative new way of inspecting its many large vertical pieces of equipment by working with specially trained rappelling professionals. These multi-talented technicians are combining their love of climbing with the challenging job of doing plant inspections in high places.

"I performed this work myself with my previous employer in southern California," said the refinery's Chief Inspector Myron Makowsky, who suggested the Burnaby Refinery try using the technology based on his previous experience. "I was certified by IRATA - the Industrial Rope Access Trade Association, which is based in the United Kingdom. The Burnaby Refinery introduced this system of inspections last summer and we work with professionals from a company called Remote Access Technology."

Rappelling is now being used to inspect any tall equipment that would otherwise require extensive scaffolding. The innovative technology is not only safe - it's cost-effective and much quicker.

"Only qualified, IRATA trained technicians can perform this work and they are always overseen by a Level 3 IRATA supervisor," said Myron. "They carry out the inspections using ultrasonic devices to determine if there is any corrosion in piping and other equipment such as vertical columns. It is part of our Condition Monitoring Program to check on piping and pressure vessels, which is based on industry codes and recommended standards."

Larger vertical columns typically use a distillation process to separate crude oil into various products. Different components within the crude separate at various levels, depending on temperatures and pressure. A benefit of the rope access inspections is being able to safely access all the piping at various levels high on the column.

The inspection technicians receive training in non-destructive testing from schools such as BCIT. Once classes are completed, students are tested and certified through the Canadian General Standards Board before they can qualify to perform this very specialized work.

As for Myron, he no longer does the "high-flying" inspections himself. "I do miss 'hanging on the ropes'," he said, "however, as I get older, I found the climbing became more suitable for the younger technicians."



SPECIALLY TRAINED INSPECTION CREWS CAN  
ACCESS ELEVATED, HARD TO REACH PLACES

# Across the Fence



## Update on New Refinery Firehall

The refinery is planning to break ground for a new firehall in mid- to late-April which will improve its onsite firefighters' response time to emergency situations. The new hall is a modular design and will be built behind the existing Chevron training centre located just off of Penzance Drive, east of the Confederation Park trail entrance.

"There will be a slight increase in traffic during construction but nothing significant," noted Project Engineer Tyson Sully. "We'll be managing a few trucks in and out of the area and all work will be done on weekdays during daytime hours."

To improve safety and access for vehicles, the project requires the entranceway from Penzance Drive to be shifted slightly to the east by about 10 feet. "When we relocate the underground utilities, we may have some temporary road access issues with only one lane open to cars," added Tyson. "We'll keep that as short as possible and a traffic flagger will be onsite to keep things moving as smoothly as possible."

Construction of the new refinery fire hall is expected to take four to five months.

## Business as Usual in the Tank Farm

It was a busy year of activity in the refinery's tank farm in 2012 with several of the tanks due for their compliance inspections and maintenance. That work has now wound up and Tank Program Coordinator Dave Williamson reports that workers are now getting back to what will be a more normal pace of routine maintenance going forward.

"Tank 117 is currently out of service and being cleaned; we will be inspecting it in mid- to late-March," said Dave. "This tank is in asphalt service, so we've used mechanical methods rather than vacuum trucks to clean the interior. Tank 81, which holds alkylate, a blending stock for gasoline, is undergoing some mechanical repairs and a few upgrades. We expect that work to be complete by late April."

Looking ahead, Dave anticipates work on tank 28 to begin in September.



## Area 2 Seepage Update

Since its discovery in 2010, the refinery has continued its efforts to manage the seepage of an oily substance near the Area 2 processing section of the refinery and along part of the Burrard Inlet foreshore. Environmental specialists now report that the seep is being successfully contained. A hydraulic barrier of approximately 40 extraction wells installed along the northern plant perimeter fence line is effectively stopping further offsite migration of contaminants.

"A number of enhancements are planned for this barrier including upgrading ten of the original wells with an alternative installation method that was used on the more recently installed extraction wells that we've found to be even more effective," said Chris Boys, Environmental Specialist. "We'll also be upgrading the piping to better accommodate the amount of groundwater being pumped. An upgraded permanent air compressor that powers the extraction system will be installed along with connection to the newly constructed replacement sewer. We expect this work to be complete this summer."

On the Inlet foreshore, an oleophilic clay barrier installed in 2011 and 2012 is doing an effective job of absorbing any liquid hydrocarbons. A more permanent remedy is in the planning stages and is expected to be implemented during the summer of 2014. In the meantime, wells are being sampled every quarter and the site is inspected weekly.



# Community Corner



THE POPULAR HATS OFF DAY SHOW AND SHINE ON HASTING STREET



CHEVRON TOOTH TROLLEY PATIENTS ARRIVING AT VCC FOR THEIR DENTAL HEALTH VISIT WITH COLLEGE STUDENTS

## Hats Off Day 2013

June is just around the corner and with it North Burnaby's annual community celebration: Hats Off Day. Refinery staff and other local merchants are looking forward to Saturday, June 1 as the day they get to mix and mingle with our Heights neighbours. The Chevron station at Hastings and Willingdon will be a hip-hop-happening place with a lively band and lots of fun activities for the kids and a great view of the annual parade, street party and Show & Shine. There are lots of reasons why Hats Off Day has been voted 'Burnaby's Best Festival' by Burnaby Now readers every year since 2005... we look forward to seeing you there!

## Chevron Tooth Trolley: Putting Smiles on Kids' Faces

For several years, the Chevron Tooth Trolley has taken school-aged children and their caregivers to and from Vancouver Community College to participate in a special dental care awareness program. The 2013 program dates are May 17, 21, 22 and 23 and will include participants from seven Burnaby elementary schools and one of the college's ESL outreach centres also located in Burnaby.

Students learn about proper oral health care and skills such as how to brush properly and foods to avoid in preventing tooth decay. Students from the College's Dental Assisting

Program also examine the children's teeth and make suggestions for follow-up care if required. If restorative or urgent work is needed, the children are referred to the UBC dentistry clinic at Vancouver General Hospital.

"It's a fun and relaxed environment with the tooth fairy dropping in for visits," said VCC instructor Margaret Dennett. "The children who come are often unlikely to receive dental care in any other way. We find that unless people are transported to our clinic they won't come. That's why we really appreciate Chevron's generous support that helps fund the Tooth Trolley."

## Looking Back

THE REFINERY'S ORIGINAL RAIL CAR LOADING FACILITY SEEN HERE IN 1945



EMPTY BOWLS EVENT  
GUESTS SELECT A BEAUTIFUL  
HANDMADE BOWL

BURNABY  
**EMPTY  
BOWLS**



# Community Corner

## Community Contact Line

### Refinery Shows its Support for the Burnaby Christmas Bureau

Some 500 staff and contractors attended the refinery's second annual Christmas lunch and toy drive this past December. Everyone was asked to bring a toy for the Burnaby Christmas Bureau and like previous years, the result was an overwhelming success with piles of fantastic toys being donated along with gift certificates and cash.

Burnaby Community Connections' executive director, Stephen D'Souza, attended the lunch and was touched by the generosity. "The refinery put a special focus on donating gifts for teens this year and it really showed" he said. "It's a powerful experience to be amongst the plant employees and contractors, all of whom really put a lot of thought and care into what they chose to give to someone who they will never meet."

### Seniors Active in Living

Chevron is also pleased to support Seniors Active in Living, a wellness program offered at Confederation Seniors Centre. Volunteers from the community offer such services as blood pressure checks and massage therapy as well as regular presentations every Tuesday on health matters for seniors.

Lulu Chavez is the program's coordinator. "We used to receive funding from the Fraser Health Authority but after years of cost-cutting it had become a real struggle to continue. Thanks to Chevron's generosity, we can continue to run our programs."

### Burnaby Empty Bowls Biennial Gala

Chevron is a long-time supporter of the Burnaby Empty Bowls gala which raises funds for a variety of food security programs throughout our city. The seventh biennial gala reception is happening Thursday, April 18 in the Crystal Ballroom of Burnaby's Hilton Vancouver Metrotown Hotel with guests enjoying tasty bites prepared by some of Burnaby's finest chefs. Enjoy jazz music by Now's the Time Trio and pick up some great items at the silent auction. All guests will receive a handmade ceramic bowl created especially for the event by community potters to take home as a memento and a reminder to help fill the empty bowls in Burnaby.



S.A.I.L PARTICIPANT BARBARA HOWARD GETS A MASSAGE FROM VOLUNTEER DENIS YOSHIOKA

"It's fantastic to see some much involvement from the community in the event and Chevron has been on board with their support since the beginning in 2001," said organizer Dale Owen.

Tickets are on sale at the ticket centre at Shadbolt Centre for the Arts: 604-205-3000.

## (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, 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 report odours or air quality issues you may also contact the Metro Vancouver air quality officer **604-436-6777**

For general information about the refinery visit [www.chevron.ca/operations/refining](http://www.chevron.ca/operations/refining)

For information about the Chevron/ North Burnaby Community Advisory Panel, visit [www.chevroncap.com](http://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.

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