

# energy pathways

**KINDER MORGAN**  
CANADA

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Burnaby Edition

## Westridge Marine Terminal: Dock Repairs



Westridge dock construction, 1950s

Westridge Marine Terminal on the south shore of Burrard Inlet is an important part of Kinder Morgan Canada's (KMC) transportation business — more than half of the jet fuel used at Vancouver International Airport arrives at this facility and more than 85 vessels will leave the facility in 2009 carrying crude oil that will be transformed into fuels, plastics and other products that we use daily.

Because KMC is committed to safety and environmental protection, we have begun a \$7 million project to rehabilitate the six mooring dolphins

at the dock. The existing mooring dolphins were constructed with the dock in 1957 and the pilings supporting these structures need to be replaced to ensure we can continue to safely moor vessels at this facility. Piles will be driven and new concrete mooring bases will be constructed.

Although we will make every effort to minimize disruption to our neighbours, they may notice the following during construction:

- » Increased vehicle traffic — staff, contractors, materials and equipment will arrive at and leave the facility via the gate at the foot of Bayview Drive.

- » Increased marine traffic near the Terminal — small vessels will deliver materials and equipment, and some work will be conducted from barges.
- » Construction type noise, including noise associated with pile driving.
- » Business as usual — the Terminal will continue to operate during the project and construction work will be scheduled around the vessel traffic.

Our neighbours' comfort is important to us. We plan to abide by City of Burnaby construction noise bylaws. We anticipate about 30 days of intermittent pile driving during the project, which will be complete by next spring.



Mooring dolphins are in-water structures supported on pilings that secure vessels' lines when docked

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。

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## Our People

### An Interview with the Burnaby Region Engineering Team

Rich Chan, Senior Operations Engineer, and Adam Lind, Western Region Operations Engineer, help meet KMC's Engineering needs in the Lower Mainland region.

#### **What project/s are you currently working on?**

**Rich:** I am currently the project manager for the Westridge Dock Repairs (see article on the front page for more about this project).

**Adam:** I spend most of my time on the Gateway Project. The province is making transportation infrastructure changes on Highway #1. Their work intersects with KMC's right-of-way in eight locations. My role is to ensure that our assets are protected during construction. This includes many tasks like analyzing stresses on the pipeline at road crossings.

#### **How will the Gateway project affect our neighbours?**

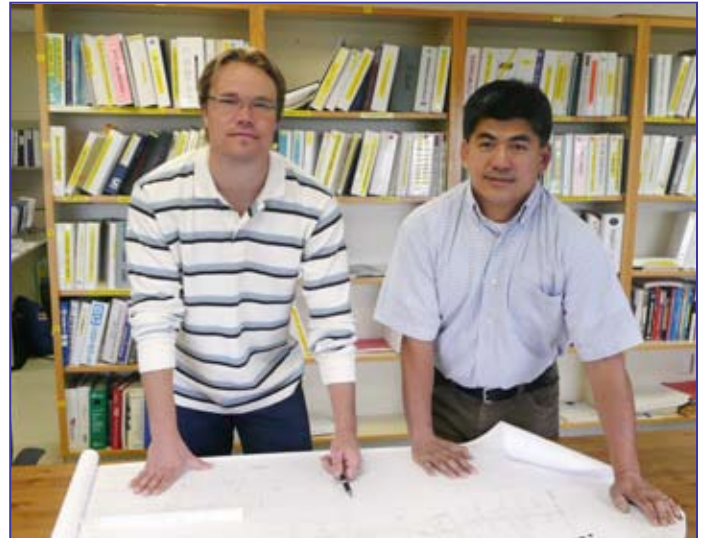
**Adam:** Being a small part of the Gateway project, our work is to ensure

that our pipeline is protected. This may involve replacing sections of the pipeline at certain crossings where the highway and pipeline intersect, or working with the construction contractors to achieve a crossing design suitable for both parties.

#### **What accomplishments are you especially proud of?**

**Rich:** I managed the pump station tie-ins that were part of the Trans Mountain Pump Station Expansion project. The work was done on schedule and with no safety incidents.

#### **What are your hobbies/interests outside work?**



Adam Lind, Rich Chan

**Adam:** I enjoy biking and skiing — being from Calgary, I've enjoyed exploring the coast as well since I love being close to the water.

**Rich:** When I have free time I like to mountain bike.

## Westridge Elementary Students Release Fish



On June 1, 2009, Mr. Martin's Grade 6/7 class from Westridge Elementary School visited KMC's Westridge Terminal on Burrard Inlet to help release 7,500 Coho salmon smolts at a Department of Fisheries and Oceans (DFO) fish pen.

For many years, KMC has hosted a DFO fish pen at its Westridge Dock facility. The fish pen is important to DFO as one of several such facilities in Burrard Inlet that hold hatchery raised salmon for about ten days each spring while the fish adjust to salt water before being released into the wild.

After being released, the salmon smolts will leave the relative safety of Burrard Inlet and head into open water. In three or four years the fish will return to the Inlet thus increasing returns, before seeking fresh water that runs into the Inlet to spawn and repeat the cycle.

We are strong supporters of education initiatives and believe in being part of the community — making this partnership a natural fit.

By visiting the fish pen on June 1, the class was building on work they've been doing throughout the school year to learn about salmon. The class raised salmon eggs in their classroom and watched them hatch, they did a role play where students were assigned different perspectives of fish farming — some students played the role of fish farmers, some acted as environmentalists, and some represented DFO staff. Finally, they dissected a salmon to better understand its anatomy. Releasing 7,500 fish on June 1 was a great way to culminate their year long learning — and appreciation for salmon!

Earlier this Spring, the fish pen had also hosted 20,000 Chinook salmon that are now happily acclimatized to the ocean environment and will someday come back to visit us here on beautiful Burrard Inlet.

# Pipeline Safety Tips for Our Neighbours:

## Leak Recognition and Response

Although rare, pipeline incidents can be dangerous. They require caution and immediate action. There are three signs of pipeline leaks: smell, sight and sound.

### Smell



The smell of petroleum can be a signal that there is a problem with the pipeline. Some products may smell like gasoline or diesel fuel; others may smell like sulphur or rotten eggs.

### Sight



A small leak may moisten the ground in the immediate vicinity of the pipeline; a large leak could cause a puddle to form on the

ground. A leak may be black or yellow-brown in colour, or transparent, like gasoline.

### Sound



A leak could sound like a hissing or roaring sound coming from the pipeline.

### What to do if a leak occurs

- » Leave the area on foot in an upwind direction, moving uphill if possible.
- » Don't touch or go near any liquid that looks like a leak, vapour cloud or frosted ground along the pipeline.
- » Don't attempt to operate the pipeline valves.
- » Don't smoke, light a match or

create a potential source of ignition. Extinguish anything that is lit, like a cigarette.

- » Don't turn on or off the lights, radios, cell-phones, or any appliances powered by electricity, batteries or natural gas.
- » Don't start or turn off your vehicle and do not drive into the area where you suspect a leak.
- » Warn others to stay away from the area.
- » As soon as you are out of the danger area, call 911 and Kinder Morgan at (888) 876-6711.

**Remember pipeline incidents are rare, but the consequences are significant so it pays to be prepared.**

## Addressing Odours



A domed roof tank at the Burnaby Terminal

Although we incorporate odour mitigation into our day-to-day activities and project work, odours are a fact of life in the petroleum business. Unfortunately, on May 6, 2009, a contractor's piece of equipment being used at the KMC Burnaby Terminal site failed. This resulted in a release of crude oil from a storage tank into a containment area. The tank was not the cause of this incident and it was not damaged. At no time was there a leak from the tank.

However, the incident did cause significant nuisance odours for our

immediate neighbours. We regret the inconvenience caused by this unfortunate event.

Our neighbours are important to us, and for that reason we take many steps to ensure their comfort including:

- » **Air quality measurement** — real time data from an air quality monitoring station at the Burnaby Terminal is sent to Metro Vancouver who is responsible for regulating air quality in the Lower Mainland region. The station monitors for sulphur and hydrocarbon parameters, the main potentially odour causing components in products that we handle at this facility.
- » **Vapour recovery** — vapour recovery systems are installed at both our Burnaby facilities. At Burnaby Terminal four of 13 storage tanks have domed roofs with recently upgraded vapour recovery systems. Because petroleum can become noticeable when it interfaces with air, the vapours are sent through a two-step

air filtration system that removes the smelly compounds.

- » **Operating considerations** — odours can be mitigated by minimizing the amount of product movement in and out of tanks, by minimizing the amount of 'vapour' space in the tanks, and by placing more odorous products in the tanks with vapour recovery systems.

All of these measures combined ensure that we continue to be considerate neighbours.



Vapour recovery unit



## Community Corner

### Westridge Elementary School Mural

Congratulations to Westridge Elementary School for the much anticipated unveiling of the Westridge Legacy Mural Project.

With the assistance of local professional artist Shelley Twist, students at Westridge Elementary had a hand in creating a lasting legacy that will be enjoyed by students and neighbours for many years.

The goal was to create a memorable piece of art that would tell a story about the community. The children were asked "what is important to you in your community?" The students drew ideas which included themes such as fun, friends, safety and nature. This provided direction for the mural. Each class explored one of the items on the list. Shelley enlarged the drawings, laid out a design representing these themes and then the students painted a piece of the mural with paint colours that they chose.

Shelley gave the children permission to be creative, and during the process, their enthusiasm grew. Many students told Shelley this was the most fun thing they had ever done!

Since community is very important to us, we were pleased to participate in this project through a contribution made from the Kinder Morgan Foundation.

The mural, depicting scenes from school and the community hangs at the entrance of the school for all to enjoy! (top left photo: Westridge mural — school scene)

### Burnaby Lake Viewing Tower Opening

On May 21, 2009, local dignitaries gathered to share in the opening of the



Local officials at the opening of the new viewing tower - photo courtesy of Pacific Parklands

Burnaby Lake viewing tower. The two story wheelchair accessible structure allows everyone to enjoy the beauty of the natural surroundings at Burnaby Lake.

We were pleased to be a part of this project by providing financial support for the tower's construction.

### Great Salmon Send Off

Congratulations to Luke Watson who won our 'guess the number of jellybeans' contest at the annual Great Salmon Send Off held on May 9, 2009, by the Stoney Creek Environment Committee. The annual event was a success with 2,500 Coho smolts being released and more than 2,000 people enjoying the event. (top middle photo: Luke Watson)

### Community Pride

We are proud to be a part of the North Burnaby neighbourhood and our employees take pride in ensuring our neighbourhood remains enjoyable and tidy. This summer, four of our summer students conducted a litter tidy up along Shellmont and Arden Streets. (top right photo: KMC neighbourhood tidy-up team)

### Contact Us

We would like to hear from you! If you have a story idea, comments or questions about our publication, please contact: **Lexa Hobenshield, Manager, External Relations** at (604) 268-3000 or [lexa\\_hobenshield@kindermorgan.com](mailto:lexa_hobenshield@kindermorgan.com)  
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