

# energy pathways

**KINDER MORGAN**  
CANADA INC.

January 2009  
Burnaby Edition

## *Primrose Hill, Right-of-Way Landscaping Update*

After working together for the past two years, Kinder Morgan Canada (KMC) and the Forest Grove Community Task Force are pleased that planting has been substantially completed on the KMC right-of-way (ROW) in front of the Primrose Hill Strata.

### **Important Milestone**

This milestone is important because right-of-way vegetation encroachment removals in 2006 left the Strata exposed to Forest Grove Drive. It also meant the loss of a forested pathway enjoyed by the community.

Of primary importance to KMC is timely access to the ROW in the unlikely event of an emergency.

Quick access is critical to effectively managing a pipeline emergency.

### **A Mutual Process**

Creating a re-landscaping plan was one of mutual education – the Task Force helped KMC understand the community's values while KMC helped the community understand its requirements for pipeline safety. The process involved a discussion with the National Energy Board, regulator of the 1,150 km KMC Trans Mountain pipeline, and advice from Val Schaefer, creator of the Green Links program. Val has expertise in increasing biodiversity along utility corridors in urban areas while respecting utility safety requirements.

The group created a set of joint principles, which guided the re-landscaping plan developed by Envirow Consulting. The plan balances the community values of providing visual screening of the Strata, enhancing biodiversity of bird, small mammal and insect populations, and restoring a natural woodland setting with KMC's need to ensure pipeline safety by maintaining visual and emergency access to the ROW.



### **Landscaping Details**

The native shrub species planted are designed to be self-sustaining when mature and will help provide natural competition against the establishment of new native trees within the open ROW. Evergreen trees will also be planted off the ROW to provide additional screening for the Strata. KMC will continue to work with the Forest Grove community as it plans selective mature tree removals on its ROW in the neighbourhood in future years.

KMC values its relationships with its neighbours, like those in Forest Grove. These relationships are critical to our success in continuing to operate pipelines safely, as we have done for more than 50 years.

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## Our People

### Meet Dave Berrouard, Right-of-Way & Crossing Technologist

#### **What does a Right-of-Way & Crossing Technologist do?**

My role is to review applications from people and organizations who intend to work near our pipelines. I perform the initial review on drawings and offer the applicant suggestions that conform to company, industry and government standards, regulations and guidelines to ensure pipelines remain safe.

#### **What is a Right-of-Way?**

The pipeline ROW is a linear corridor of land over and around the pipeline.



Our federally regulated ROWs are typically 60 ft (18 m) wide while our provincially regulated (jet fuel system) ROWs can range from 7 ft (2 m) to 30 ft (9 m). Pipeline markers are located along the route and identify the general location of the pipeline. Markers specify the product transported, the operator's name and an emergency contact number. They do not identify the exact location or depth of the pipeline.

#### **What do you enjoy most about your job?**

I enjoy dealing with people – from working with pipeline field technicians to dealing with the public.

Often during my lunch break I will run through the neighbouring Forest Grove and Stoney Creek communities. It helps me connect with the neighbourhood and keep an eye out for any activity along the pipeline; it's a perspective you can't get from your vehicle.

#### **Rumour has it that you are an accomplished triathlete. Can you tell us more about that?**

I turned to triathlons 19 years ago. I enjoy the variety – each of the three sports (swimming, cycling, running) complement and balance each other. I completed my first Iron Man nine years ago, which I still consider as one of my proudest accomplishments. I continue to compete in half Iron Man and Olympic distance triathlons each year. Within the next two years, I hope to compete in another full Iron Man.

#### **Do you have a philosophy of life you can share with us?**

I'm a real believer in giving back. I try to target one or two events each year and rather than compete in them, I volunteer. This past year, I volunteered with other KMC employees at the Giro di Burnaby and the Great Salmon Send Off at Stoney Creek.

## Our Wild Neighbours

#### **Meet the Canada Goose, *Branta canadensis***

Since KMC's Burnaby Terminal was constructed in the 1950s, native grasses such as *Glyceria leptostachya*, also known as Buckl, *Hippuris vulgaris* L. and *Ranunculus flammula* L., have been planted, offering a unique and life-sustaining ecosystem. The grasses provide food, shelter and protection to a variety of plants, animals and insects, including songbirds and the Canada Goose.

#### **Canada Goose Facts**

- » There are at least 11 subspecies of the Canada Goose.
- » Individual geese make annual northward migrations up to 1,500 km to take advantage of vegetation to fuel their molt.
- » The Canada Goose subspecies, *B. canadensis maxima*, was formerly bred from central Manitoba to Kentucky but it was nearly driven to extinction in the early 1900s. Programs to re-establish the subspecies were successful and the goose flourishes today.



# Emergency Response

## **Preparing Today for a Safer Tomorrow**

Every year, more than \$110 billion worth of energy products are safely transported through 45,000 km of pipeline crisscrossing Canada, including KMC's 1,150 km Trans Mountain pipeline, the only direct link from Alberta to the west coast of North America. That's nearly one-quarter of all Canadian goods or services.

With a strong reliance on pipeline transportation, emergency response and safety are top priorities for KMC. However, safe operations are no accident – careful planning and execution are critical to ensuring pipelines remain safe.

## **Area Emergency Response Plans**

Our comprehensive Area Emergency Response Plans address pipeline safety and emergency preparedness for all of our systems.

These plans include step-by-step actions for any level of emergency, from a small, fully contained leak to a worst case scenario of pipeline failure in a highly populated area. The plans outline steps such as a shut down of the facility or pipeline, deployment of response and emergency teams, internal and external communications and implementing techniques to handle the emergency.

## **Involving the Community**

In addition to complying with National Energy Board safety regulations, we perform emergency preparedness exercises several times per year, varying geographic locations and emergency scenarios. Tabletop drills take place in the office and involve training staff in managing emergency procedures. Deployment drills take place in the field and involve testing emergency response equipment and training. These exercises are

performed by our employees and often include community members such as fire departments, government officials and other emergency responders.

## **Partners in Pipeline Safety**

Mutual aid agreements can play a key role in assisting our response efforts. External specialist agencies can offer us resources such as equipment and people. We have a longstanding relationship with Western Canada Spill Services and are also a founding and active member of Burrard Clean Operations, a marine response group based in Burnaby.

Partnerships within the community and our own stringent emergency response plans and exercises ensure that we have the highest level of preparedness to address any emergency situation.

# Dockside At Westridge Marine Terminal

Have you ever wondered how jet fuel is supplied to Vancouver International Airport (YVR)? Did you know that in addition to loading and unloading tanker ships down on the docks, that fish are raised and then released?

## **Moving Jet Fuel**

The journey begins at Westridge Marine Terminal when the jet fuel arrives by barge from Washington State. Once the barge is docked, an assist tugboat noses it in and holds it tight against the dock. Over 1,700 ft (518 m) of partially submerged 24-inch (61 cm) rubberized boom is set around the barge, a precautionary measure to prevent the migration of fuel in the unlikely event of a spill during offloading.

The fuel is then transferred from the barge into one of three holding tanks at the terminal. It then passes through 32 km of 6-inch (15 cm) pipeline

to YVR. If the fuel were pumped continuously, it would take about 140 hours for it to reach YVR. Instead, it's pumped on an as-needed basis, much like filling your car at a gas station.



## **What About Odours?**

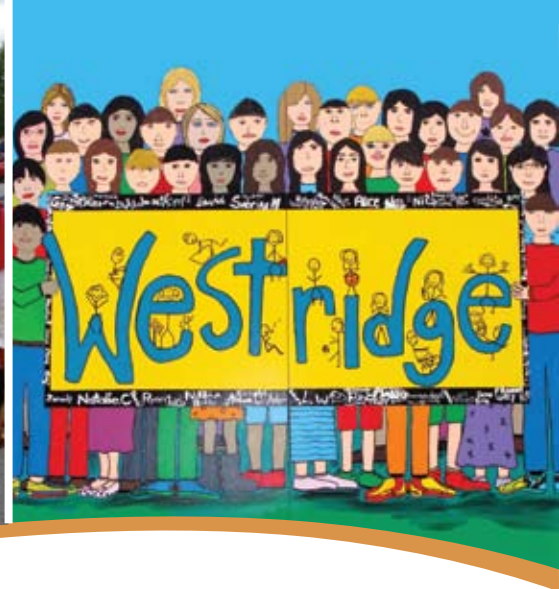
When crude oil is loaded onto vessels, stringent odour control measures are used to ensure that there are no unpleasant or harmful odours. The vapours from the vessel

pass through a 4 ft (1.2 m) bed of SulfaTreat (a coarse, granular product that is non-toxic, non hazardous and environmentally stable), to remove the hydrogen sulfide and mercaptans, a toxic substance with an unpleasant smell. The remaining vapours are a colourless gas that continue on to the burner where they are burnt off to prevent any unpleasant or harmful odours.

## **True Fish Tales**

In partnership with the Department of Fisheries and Oceans (DFO), KMC offers one of its wooden dock areas at the terminal for raising fish. Twice a year the DFO releases fingerlings into the netted area.

For two weeks, we feed the fish twice a day and help them get acclimatized before they are released to the ocean.



## Community Corner

### ***Barnet Marine Park Enhancement***

The Kinder Morgan Foundation is pleased to make a contribution towards enhancements planned for Barnet Marine Park, a project that will link the Westridge neighbourhood to the park. KMC is a proud part of the Westridge community and this contribution will enhance the City of Burnaby park system for the enjoyment of local residents and visitors.

### ***2008 Energy Pipeline Operator of the Year***

KMC was honoured as a leader in the pipeline industry at the recent 7th International Pipeline Conference in Calgary with the 2008 Energy Pipeline Operator of the Year Award.

The award recognizes KMC for effectively integrating technology, personnel, safety and regulations in its pipeline operations, and considers the company's reputation for technical and fiscal responsibility, active participation in the development of pipeline standards, codes, research and technical integration.

### ***Giro di Burnaby***

We were pleased to be part of the 2008 Giro di Burnaby, a 1.85 km criterium (short course bike race) through the streets in Burnaby Heights. Not only was KMC a sponsor of the event, but for the second year in a row, seven employees and friends volunteered at the Giro.

Thank you to our volunteers: Delia Imola and her husband Fernando, Donna Ferguson, Rich Chan, Dave Berrouard and his friends Neil Vaughan and Jason Young. We're proud to have you as part of Team Kinder Morgan!

### ***Westridge Elementary School Mural***

Phase 1 of the Student Mural Legacy Project at Westridge Elementary School has been completed! Led by artist Shelley Twist, each of the 230 students from the school participated in the vision of the project by reflecting on "What does unity in community mean to you?"

The Kinder Morgan Foundation was proud to support the Student Mural Legacy Project. We look forward to the unveiling ceremony in January 2009 when Phases 2 & 3 are completed!

### ***Contact Us***

We would like to hear from you! If you have a story idea, comments or questions about our publication, please contact:

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