

## Emergency Response

- » Kinder Morgan Canada is an industry leader in safety and emergency response.
- » We have Emergency Response Plans for all of our facilities that include information for our staff like notification requirements, emergency response roles and responsibilities, and route maps.
- » Emergency response equipment is stationed at various locations along the pipeline route and trained personnel are available to respond in the unlikely event of an emergency.
- » Emergency Response Plans are practiced on a regular basis; sometimes in conjunction with other community emergency response personnel to ensure continual improvement of emergency preparedness techniques, equipment, and communications.
- » Trans Mountain was a founding member of Burrard Clean, now operating as the Western Canada Marine Response Corporation, responsible for responding to spills along the B.C. coast.
- » Pipelines are the safest, most efficient way to transport petroleum products, and we work hard to keep them that way.



We are dedicated to keeping our pipelines safe, protecting the environment, and ensuring the safety of the communities in which we operate. For this reason, we have developed pipeline safety programs, such as:

## Integrity Management Program

Kinder Morgan Canada is committed to maintaining the long-term integrity of our pipeline. This is a process of data monitoring, analysis, and mitigation that continues for the life of the pipeline. The Integrity Management program includes the following:

### CORROSION PROTECTION

Pipelines are constructed to nationally-recognized engineering standards. During construction, an anti-corrosive protective coating and cathodic protection system is installed on the pipe to ensure longevity.

### MONITORING SYSTEM

Equipment installed along the pipeline monitors pressure flows and other factors. A Supervisory Control and Data Acquisition (SCADA) system monitors this equipment remotely 24 hours a day, seven days a week from Edmonton, Alberta. This system notifies Control Centre Operators (CCO) if there is a potential problem with any section of the pipeline.



Control Centre Operator, Edmonton, AB

### INSPECTION

Regular electronic internal inspection detects anomalies. If an anomaly is identified, a portion of the pipe is exposed and inspected. If necessary, the section of pipe is repaired or replaced.

### LEAK DETECTION

Remote instrumentation alerts CCOs of potential problems along the pipeline. If necessary, shut down valves can isolate sections of the pipeline until staff can inspect equipment in person.

## Damage Prevention Program

By ensuring clear visual and physical access of the pipeline right-of-way, Kinder Morgan can 'prevent' damage before it occurs. Clear unimpeded access is critical to timely emergency response; and ensures we meet our regulatory requirements.

### PIPELINE MARKERS

The pipeline is identified by markers located in the right-of-way along the route. These markers do not identify the exact location of the pipeline within the right-of-way. Only qualified Kinder Morgan employees can determine the specific location and depth of the pipeline.



### CALL BEFORE YOU DIG

Kinder Morgan is a member of provincial 'Call Before You Dig' programs. These programs consolidate data about the location of buried facilities for the information of anyone planning to excavate in a given location near the pipeline.

**Alberta One-Call: 1-800-242-3447**

**BC One Call: 1-800-474-6886**

**Sask 1st Call: 1-866-828-4888**

### CROSSING PERMIT PROCESS

Landowners, tenants, excavators or contractors require written approval from Kinder Morgan for projects or activities occurring across, along or on our right-of-way. Anyone planning to construct or install a road, utility, etc. across our right-of-way must apply for a Crossing Agreement. **In British Columbia, call 1-866-268-3001. In Alberta and Saskatchewan, call 1-866-677-0771.**

### SAFETY ZONE PERMIT PROCESS

The safety zone extends 30 metres (100 feet) on either side of the right-of-way. To ensure safety, excavation using mechanical equipment within this zone requires approval from the pipeline company. However, the existence of the the safety zone does not preclude development of the land. Additionally, the use of explosives within 100 metres (300 feet) of the right of way requires approval from the company.

**IN CASE OF PIPELINE EMERGENCY, CALL 24 HOURS: 1-888-876-6711**



### AERIAL AND GROUND SURVEILLANCE

- » The pipeline right-of-way is inspected from the air on a regular basis.
- » Pipeline maintenance crews are strategically located at seven locations along the line. Staff look for signs of erosion or unauthorized encroachments along the right-of-way during the course of their normal work duties.

### VEGETATION MANAGEMENT

- » If a right-of-way is not landscaped by the landowner, Kinder Morgan usually mows grass or low growing vegetation annually in cooperation with the affected landowner. If a right-of-way is landscaped by a landowner, he or she is typically responsible for the appropriate use and maintenance of the area.
- » In some cases, Kinder Morgan also works with landowners to remove vegetation that has been allowed to grow beyond a safe level.



### ENCROACHMENT REMOVAL

- » Kinder Morgan employees sometimes work with property owner to remove unauthorized sheds or other encroachments within the right-of-way to ensure ongoing safety of pipeline operations.

### LAND USE PLANNING INPUT

- » Kinder Morgan works with local municipalities and other stakeholders so that land use near and on the right-of-way remains an appropriate use to ensure long-term safety of the pipeline.

### PUBLIC AWARENESS

- » Many pipeline incidents occur as a result of work being conducted near the pipeline without prior knowledge or consent of Kinder Morgan.
- » By communicating with landowners and other stakeholders about the locations of our facilities and the processes required to protect the pipeline, we aim to reduce the incidence of pipeline strikes.