

Project Proposal
October 2007

KINDER MORGAN CANADA TERMINALS

Heartland Regional Sulphur Forming and Handling Terminal

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Summary

Kinder Morgan Canada Terminals (“KMCT”) proposes to develop a **Regional** Sulphur Forming and Handling Terminal strategically located in the heart of Strathcona County’s industrial area (“Heartland site”), surrounded by existing and future upgraders and refineries (Figure 1).

KMCT’s Heartland site is ideally situated to become a regional sulphur solution because it is:

- adjacent to industrial neighbours reducing additional pipeline, rail and truck movements in and out of the area, and
- away from major residential communities reducing land-use conflicts and environmental and visual concerns.



Figure 1

Our Expertise

Kinder Morgan Energy Partners (“KMP”), of which KMCT is a subsidiary, is a US\$20 billion enterprise that transports more than 600 million barrels of petroleum and chemical products yearly, as well as handles over 90 million tonnes of sulphur, petcoke, and other dry-bulk materials. KMP is the largest independent terminal operator in North America with over 150 terminal locations and provides KMCT with extensive industry expertise, such as:

- Over 25 years of sulphur operations and technical expertise,
- Proficiency in designing, constructing, operating, and maintaining safe and environmentally sensitive facilities,
- Acquired Devco technology – the safest sulphur-forming process in the industry. Devco forming technology has never had a fire in its operating history,
- Leading environmental practices,
- Significant infrastructure and operations in Alberta, and
- Extensive access to capital for investment in future expansions.

Industry Solution

Sulphur is the chemical element that has the symbol S and atomic number 16. It is an abundant, tasteless non-metal. Sulphur, in its native form, is a yellow crystalline solid. In nature, it can be found as the pure element or as sulphide and sulphate minerals. It is an essential element for life and is found in two amino acids, cysteine and methionine. Its primary commercial use is in fertilizers.
(Excerpt taken from Wikipedia)

Sulphur is a by-product of the oil refining process and its production is on the increase. This increase in sulphur production and what to do with it is becoming a significant concern for all of Alberta – especially for the industries that produce sulphur and the residents that live in close proximity to these facilities. In fact, in the Heartland Industrial Area alone, sulphur production is forecast to reach four million tonnes per year by 2021. “What to do with this sulphur?” requires an answer, and we believe our KMCT “industry solution” is the best way to address this concern.

Our proposed solution is to build a Regional Sulphur Forming and Handling Terminal. KMCT’s industry terminal would service all surrounding sulphur-producers and eliminate the need for each of these individual facilities to build their own sulphur forming and handling terminals. KMCT’s industry terminal would create economies of scale as a result of the industry-shared facility, which in turn would lower sulphur forming and handling costs to our customers and encourage sulphur exports—**cheaper sulphur moves first—out of Heartland, out of Alberta.** The scale of this facility will give KMCT the ability to add state-of-the-art safety and environmental management systems without materially impacting the overall project economics.

A key component of our solution is the location of our site. Centered in the Heartland Industrial Area surrounded by industrial users who produce sulphur, this site is ideally located for both sulphur-producing facilities and transportation networks.

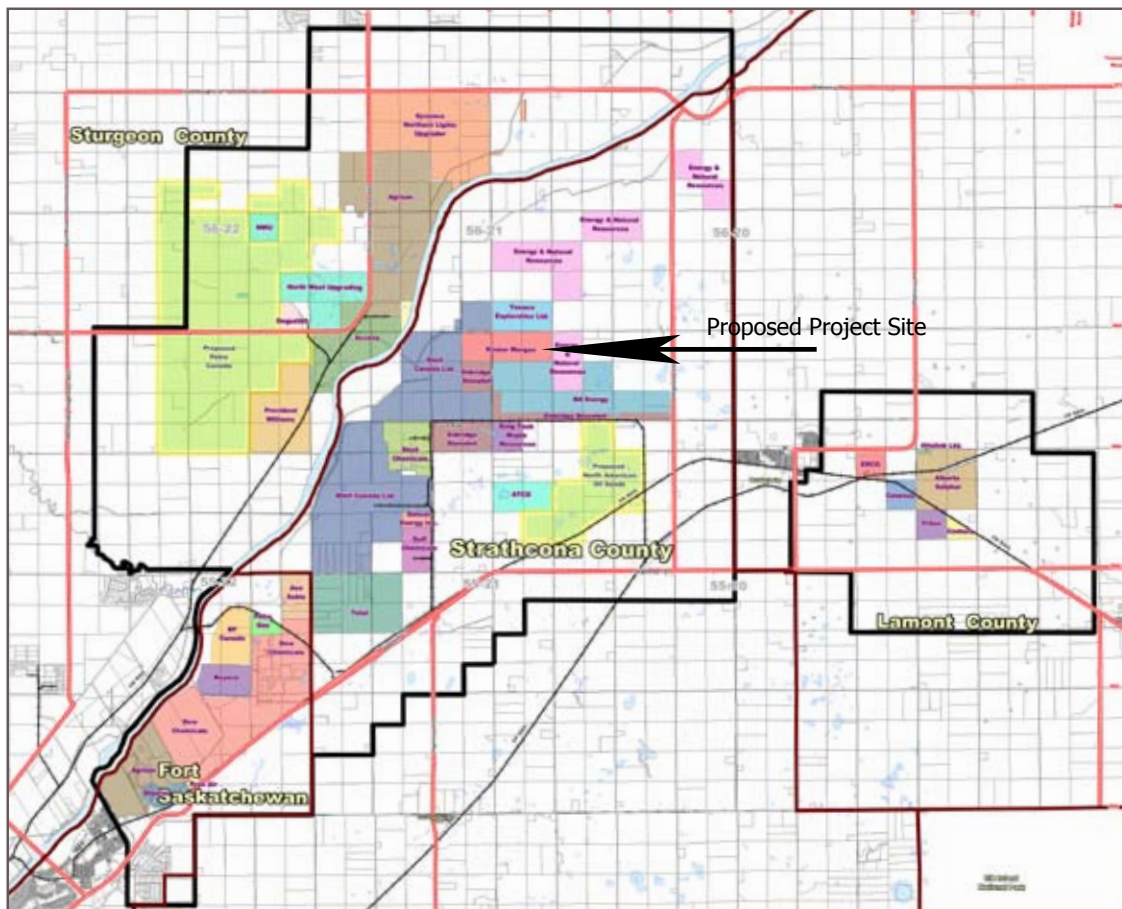


Figure 2 (courtesy of Alberta's Industrial Heartland)

Heartland Regional Sulphur Forming and Handling Terminal

The proposed KMCT Regional Sulphur Forming and Handling Terminal will be developed to accommodate the various levels of sulphur production. A preliminary design has been developed for the initial Heartland industrial production requirement in 2010 with phased expansions to accommodate the anticipated production increases identified through to 2021 (Figure 3). A conceptual design of the facility is illustrated by Figure 4.

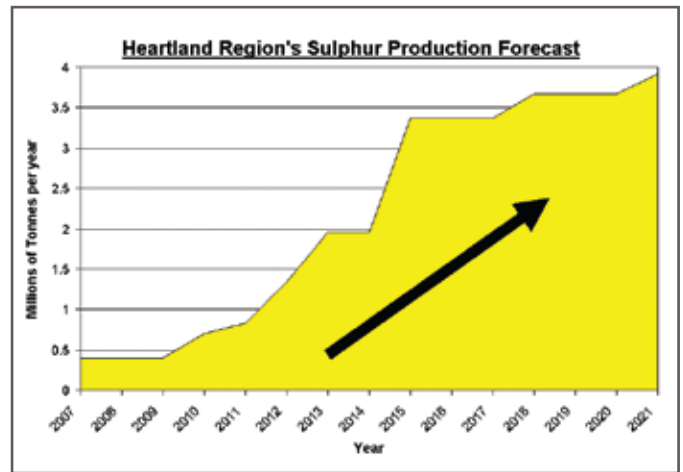


Figure 3

Terminal Process

Our forming and handling process begins with receipt of liquid sulphur via pipeline and/or truck. Our design utilizes a heated storage tank which holds sufficient liquid sulphur prior to forming. The liquid sulphur tank will have treatment facilities for the elimination of H₂S gases and associated odours in the tank. The liquid sulphur is pumped into forming units and processed into solid dry pellets. The formed product is then conveyed to storage silos which will contain the sulphur production. KMCT will schedule trains to arrive once the volume within the silos equals a unit train (approximately 10,000 tonnes or 100 cars). Unit trains can be rapidly loaded evenly within 4-6 hours using a top-of-the-line rail car loading station for shipment to export markets.

During normal operation, all sulphur is handled using automated equipment and stored within contained storage (liquid tanks and silos). This approach will minimize dusting, odour concerns, and with maintaining of the existing perimeter treeline, will provide visual mitigation. For backup purposes, KMCT will have onsite capacity to store sulphur in an open pile. This backup storage capacity is required to allow continued delivery of sulphur to the terminal during rail delays due to landslides, avalanches, labour strikes, or other potential outbound disruptions. KMCT will make all reasonable efforts to reclaim the open pile as quickly as possible once the outbound disruption has been resolved.

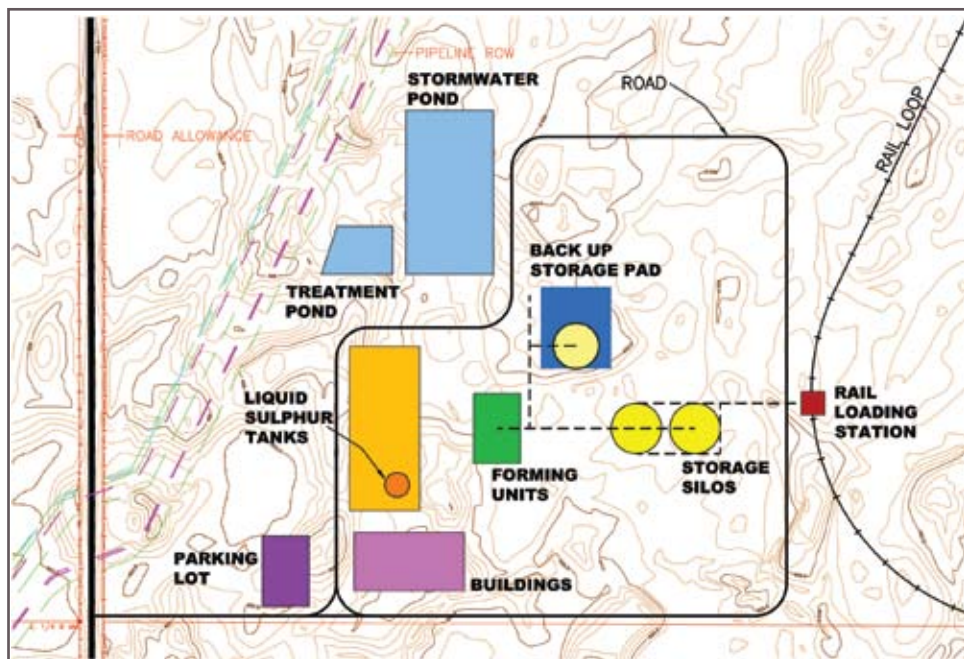


Figure 4

Terminal Facilities

Key elements of the terminal facility (Figure 5) include:

- A. Pipeline and truck receiving systems,
- B. Liquid sulphur storage tanks,
- C. Forming systems,
- D. Conveyance systems,
- E. Formed sulphur storage silos,
- F. Rail loading facilities and connections,
- G. Backup storage pad.

Final commercial arrangements and the results of public consultation, environmental studies and regulatory process will guide the final facility design.

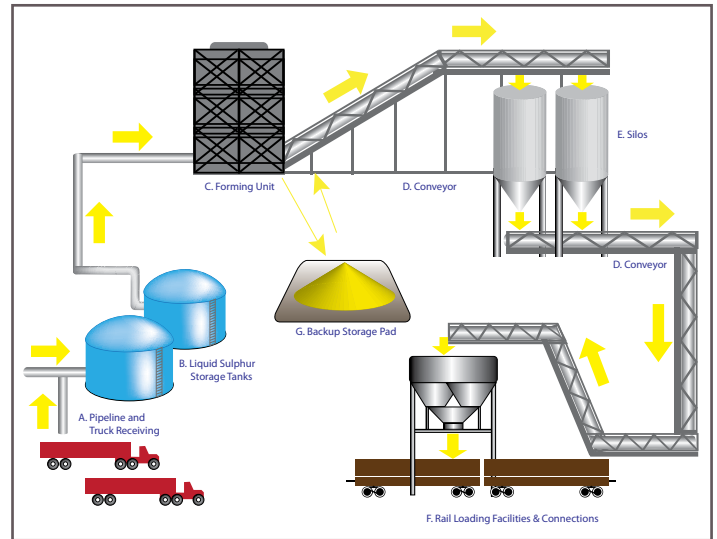


Figure 5

Fire Protection System

KMCT views its fire protection system as a critical component to the safe operation of a sulphur forming and handling terminal. A firewater system will be installed to provide firewater to all at-risk areas of the terminal. The firewater system will consist of a water pipeline loop around the terminal supplied via a pump (with backup) which is connected to an on-site water pond. This system will be designed in accordance with all applicable codes. Monitors (similar to fire hydrants) will be installed at key locations throughout the terminal where required. The firewater system will be supplemented with auxiliary systems such as electronic sensors, automated shutdown devices, and strategically located fire extinguishers.

Emergency Response

KMCT will develop the necessary emergency response plans and procedures to meet all provincial and municipal regulatory requirements.



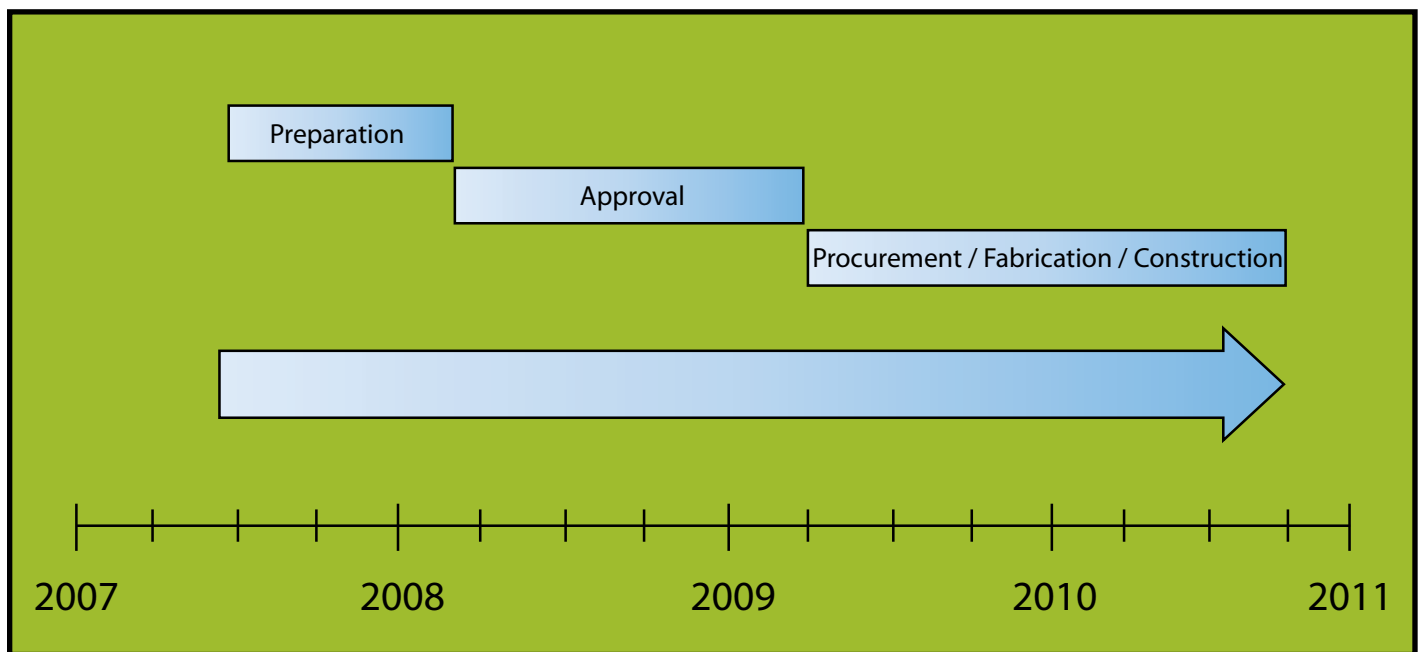
Regulatory Review Process

This regional sulphur solution is fully aligned with the overall industrial development plans for the region. Facilities like this are carefully regulated and will be developed in an orderly fashion. This proposal presents a safe, superior and practical solution to service the local upgraders and refineries in the area for current and future sulphur-processing requirements.

This facility Project requires regulatory approval from Alberta Environment (any associated pipelines would

be subject to Alberta Energy and Utilities Board approval). KMCT will undertake all the necessary engineering design, commercial, environmental studies and public consultation activities in support of the Project application. The application will be made pursuant to Alberta Environment requirements. It is currently anticipated that an application for the Project will be submitted to Alberta Environment in the first half of 2008.

Project Schedule



Glossary of Terms

Devco technology

Devco technology (wet-forming) involves dripping liquid sulphur into a container of water where it solidifies into small solid pellets.

Solid dry sulphur pellets

Pellets are small spherical shaped pieces (approximately 5mm in diameter) of formed sulphur.

Conveyance systems

Conveyance systems are used to describe the required conveyor belts and associated structures for automated transferring of formed sulphur product.

Firewater system

On-site pressurized water pipelines available for fire-suppression.

Environmental Considerations

KMCT is committed to environmental stewardship and will incorporate all practical measures to minimize environmental impacts on the surrounding area. An environmental and socio-economic assessment will be undertaken to identify and quantify potential impacts to soils and terrain, vegetation, wildlife, hydrogeology, hydrology, socio-economics, air quality (emissions and odours), noise, traffic and visual impacts. A human health assessment will also be conducted based on the results of the air quality and noise assessments. Mitigation measures will be developed to ensure all potential impacts are minimized and all regulatory standards are met. All mitigation measures will be outlined in a project-specific conservation and reclamation plan, which will include a construction environmental protection plan.

Public Consultation

KMCT is committed to timely consultation and working collaboratively with stakeholders. A comprehensive public consultation and communications program has been developed for the Heartland Regional Sulphur Forming and Handling Terminal Project. All questions and issues raised by stakeholders will be tracked and become the focus of issues resolution strategies for the project team. Responses to questions and issues will be provided in a timely manner. Any interested stakeholder can contact KMCT directly for further information or to be included in future consultation activity.

Economic Benefits

The capital cost for the initial phase of the Project is estimated between \$50-60 million. Significant economic activities and benefits will be generated in the Heartland region as a result of the Project. These may include but are not limited to:

- generation of construction jobs
- creation of operational employment,
- usage of local suppliers,
- increases to local tax base.



Contact Information

Any questions or requests for further information regarding the Heartland Regional Sulphur Forming and Handling Terminal Project should be directed to:

General Inquiries

Kinder Morgan Canada Terminals
Suite 2700, 300 – 5th Avenue SW
Calgary, Alberta T2P 5J2
Toll Free: 1.877.867.2464
www.kindermorgan.com/business/canada

Media Inquiries

Kinder Morgan Canada Terminals
Philippe Reicher
Director, External Relations
philippe_reicher@kindermorgan.com
403.514.6450

Data presented in this document are approximate in nature and are based on current public information regarding the Project.

