



File OF-Fac-PipeGen-K077 01  
21 December 2012

Mr. Ron McClain  
Vice President - Engineering and Operations  
Kinder Morgan Energy Partners – Cochin Pipeline  
500 Dallas St, Suite 1000  
Houston, Texas 77002  
Facsimile 713 495 2735

Dear Mr. McClain:

**Kinder Morgan Energy Partners, L.P. (Kinder Morgan)  
Cochin Pipeline System  
Eastern and Western Canada**

The National Energy Board (Board) requires companies to take effective actions to prevent the occurrence of pipeline leaks and ruptures. The Board also expects pipeline companies to continually evaluate and improve the effectiveness of its integrity management program. This expectation includes improving a company's integrity management practices to prevent an incident from occurring anywhere on its pipeline systems under the Board's jurisdiction.

The Board is aware that the Cochin Pipeline sustained a Stress Corrosion Cracking (SCC) failure in the United States (US) in 2003. As a result, the Pipeline and Hazardous Materials Safety Administration (PHMSA) issued a Corrective Action Order that imposed a 20% pressure restriction on the pipeline. After acquiring ownership from British Petroleum (BP) in 2007, Kinder Morgan voluntarily imposed a further restriction on the operating pressure of the pipeline to 4137 kPa (600 psi). The intent was to allow time for Kinder Morgan to assess and remediate hazards such as SCC. Upon completion of the assessment and remediation on the pipeline, PHMSA approved a request made by Kinder Morgan to increase the operating pressure of the pipeline in US to 6895 kPa (1000 psi) on 30 March 2012.

The Board understands that the assessment and remediation Kinder Morgan undertook in the US to verify the integrity of the Cochin Pipeline in response to the threat posed by SCC was extensive. This included confirmatory hydrostatic pressure tests on various pipeline sections. Notwithstanding this, PHMSA did not approve a pressure increase to the Cochin Pipeline's MOP of 9929 kPa (1440 psi). As a result, there appear to be remnant concerns with the integrity of the Cochin Pipeline in the US.

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While Kinder Morgan has claimed there are no similar integrity issues on the Cochin Pipeline in Western Canada, the presence of significant SCC on the Cochin Pipeline has been previously reported to the Board by BP.

Although Kinder Morgan has conducted inspections for SCC on the Cochin Pipeline in Western Canada through in-line inspection employing a Transverse Field Magnetic Flux Leakage Inspection tool and applying the Kinder Morgan Assessment Protocol, the Board has previously deemed the crack detection methodology employed by Kinder Morgan to be inappropriate.


In order to re-affirm the fitness for service of the Cochin Pipeline, the Board has issued Order SO-K077-005-2012. The Order restricts the operating pressure of the Cochin Pipeline in Western Canada to 4137 kPa (600 psi) and directs Kinder Morgan to demonstrate the Fitness for Service (FFS) of the pipeline at that pressure. The Order also restricts the operating pressure of the Cochin Pipeline in Eastern Canada to 6895 kPa (1000 psi). In the event Kinder Morgan plans to increase the pressure on the Cochin Pipeline, the Order directs Kinder Morgan to demonstrate FFS to the MOP of the Cochin Pipeline. The FFS assessment(s) shall include evidence that Kinder Morgan is able to effectively detect, assess, mitigate or otherwise prevent hazards, such as SCC, on the Cochin Pipeline.

Kinder Morgan must submit a written request to the Board seeking approval to lift the pressure restriction set out in the attached Order once the appropriate conditions are met.

Should you have any questions or comments, please contact Doug Ochitwa at 403-299-2794, or via email at [doug.ochitwa@neb-one.gc.ca](mailto:doug.ochitwa@neb-one.gc.ca)

Yours truly,



 Sheri Young  
Secretary of the Board

Attachment



**ORDER SO-K077-005-2012**

**IN THE MATTER OF** the *National Energy Board Act* (the Act) and the regulations made thereunder; and

**IN THE MATTER OF** promoting the safety and security of operation of the Cochin Pipeline System in Western Canada by Kinder Morgan Energy Partners, L.P. (Kinder Morgan), National Energy Board file OF-Surv-Inc-2010-02 01.

**BEFORE** the Board on 20 December 2012.

**WHEREAS** the Board regulates the operation of the Cochin Pipeline;

**AND WHEREAS** the Board requires Kinder Morgan to re-affirm the fitness for service of the Cochin Pipeline for continued operation at its current pressures, or at any intended increase in pressure;

**AND WHEREAS** the Board takes appropriate actions pursuant to sections 12 and 48 of the Act to promote the continued safe and secure operation of the pipelines under its jurisdiction;

**NOW THEREFORE**, pursuant to sections 12 and 48 of the Act, the Board hereby orders the following safety measures:

1. The operating pressure of the Cochin Pipeline in Western Canada, from Fort Saskatchewan, Alberta, to the international border, shall not exceed 4137 kPa (600 psi) unless the Board otherwise directs.
2. The operating pressure of the Cochin Pipeline in Eastern Canada, from the centerline of the Detroit River to the terminus in Windsor, Ontario, shall not exceed 6895 kPa (1000 psi) unless the Board otherwise directs.
3. Within five (5) days of the date of this Order, Kinder Morgan shall provide written confirmation to the Board of its compliance with Conditions 1 and 2 of this Order.
4. Within 180 days of the date of this Order, Kinder Morgan shall file, for Board approval, a comprehensive Fitness for Service (FFS) assessment that demonstrates the Cochin Pipeline in Western Canada is safe for continued operation at 4137 kPa (600 psi).

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- a. Within 30 days of the date of this Order, Kinder Morgan shall file, for Board approval, the scope and detail of the proposed FFS assessment.
  - b. Within 30 days of the date of this Order, Kinder Morgan shall file, for Board approval, the name and qualifications of a proposed independent third party to validate the FFS assessment.
  - c. The third party shall report all draft, partial and final reports to both Kinder Morgan and the Board simultaneously.
5. In the event Kinder Morgan plans to increase the pressure on the Cochin Pipeline, in either Western or Eastern Canada, Kinder Morgan shall file, for Board approval, a comprehensive FFS assessment that demonstrates the pipeline is safe to operate at the designed maximum operating pressure of 9929 kPa (1440 psi) before any increase in operating pressure can be undertaken.
- a. Kinder Morgan shall file a notification with the Board of any planned increase in operating pressure on the Cochin Pipeline.
  - b. Within 30 day of Kinder Morgan's notification to the Board, Kinder Morgan shall file, for Board approval, the scope and detail of the proposed FFS assessment.
  - c. Within 30 days of Kinder Morgan's notification to the Board, Kinder Morgan shall file, for Board approval, the name and qualifications of a proposed independent third party to validate the FFS assessment.
  - d. The third party shall report all draft, partial and final reports to both Kinder Morgan and the Board simultaneously.
6. Kinder Morgan shall, at least 21 days prior to a planned increase in operating pressure of the Cochin Pipeline, file a written request to the Board seeking approval to increase the pressure on the Cochin Pipeline. The request shall include, but not be limited to, evidence that the requirements of Condition 4 and Condition 5 of this Order have been met to the satisfaction of the Board.

NATIONAL ENERGY BOARD



Sheri Young  
Secretary of the Board