

National Energy  
Board



Office national  
de l'énergie

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To: All companies under National Energy Board jurisdiction  
Canadian Energy Pipeline Association  
Canadian Association of Petroleum Producers, and  
Provincial Regulators

**National Energy Board Safety Advisory  
NEB SA 2007-01**

Attached is a safety advisory regarding the hazards associated with pipeline pigging activities. The Board expects that this advisory be given wide circulation to personnel involved in maintenance and pipeline operations within your organization.

If you have questions concerning this initiative, please call Karen Duckworth at (403) 299-3669 or Glenn Cameron at (403) 299-3624.

Yours truly,

A handwritten signature in black ink, appearing to read "David Young".

David Young  
Acting Secretary

Attachment

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## Pipeline Pigging Operations: Open to Injury

### Incident Description

At approximately 5:15 p.m. on November 23, 2006, during planned work related to an internal inspection project, two batch pigs were ejected under pressure from the barrel of a 14" temporary receiving trap striking and seriously injuring two workers. A contractor on site witnessed the incident and experienced symptoms of shock.

This is the eighth NEB reported pipeline pigging related injury incident since 1962. The Board is concerned as it notes that regulators are typically only aware of those pigging incidents that seriously injure or kill, since near misses are normally not reported. Prevention, awareness, personnel training and appropriate pig trap design are key!

### Factors Contributing to Pipeline Pigging Incidents

- Design of receiving trap
- Method or tools used for extracting lodged pigs
- Pressure expansion of trapped gas behind sealed pig
- Leaking valves
- Plugged vents
- Hydrate formation
- Lack of training or complacency
- Lack of hazard awareness
- False sense of security and reliance only on pressure gauges
- Sour gas trapped in pig cups

### Preventive Actions

- Management review of existing facility design and design specifications
- Technical analysis which considers pigging parameters such as product, operational function, constraints, pig train length and clearance between the pig and the trap inside diameter
- Hazard identification and risk assessment including management of changes
- Awareness, training and competencies of personnel
- Procedures that address normal and upset conditions

**“STAY OUT OF THE PIG’S LINE OF FIRE”**