Changing Face of Accountability

..........eh!

Canadian Energy Pipeline Association

JIM DONIHEE, OMM, CD
CHIEF OPERATING OFFICER, CEPA
21 OCTOBER 2016
CEPA and its members

MISSION

We engage and collaborate to continually improve our industry’s safety, sustainability and transparency, and the business environment within which it operates.

- Access Pipeline Inc.
- Alliance Pipeline Ltd.
- ATCO Pipelines
- Enbridge Pipelines Inc.
- Inter Pipeline Ltd.
- Kinder Morgan Canada
- Pembina Pipeline Corporation
- Plains Midstream Canada
- Spectra Energy
- TransCanada PipeLines Limited
- TransGas Limited
- Trans-Northern Pipelines Inc.
Pipeline industry vitals

- Over 60 years in Canada
- HIGHLY REGULATED industry
- Transports 97% of the natural gas and onshore crude oil produced in Canada
- ~130,000 kilometres of pipeline in Canada and the U.S.
- Safe and environmentally sound
- Contributions to Canada’s GDP (2015): $11.5B

aboutpipelines.com
Failure to Anticipate
What happened... evolving expectations?

Trust = f (Performance, Accountability & Transparency)
Building trust in uncertain times
How would you rate the companies that operate oil and gas pipelines in each of the following respects?

<table>
<thead>
<tr>
<th>Area</th>
<th>0%</th>
<th>10%</th>
<th>20%</th>
<th>30%</th>
<th>40%</th>
<th>50%</th>
<th>60%</th>
<th>70%</th>
<th>80%</th>
<th>90%</th>
<th>100%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Creating jobs for Canadians</td>
<td>66%</td>
<td>17%</td>
<td>8%</td>
<td>9%</td>
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<td></td>
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<tr>
<td>Delivering energy efficiently</td>
<td>60%</td>
<td>19%</td>
<td>11%</td>
<td>10%</td>
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<tr>
<td>Using the latest and best technologies</td>
<td>58%</td>
<td>19%</td>
<td>9%</td>
<td>14%</td>
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<tr>
<td>Helping Canada secure the benefits of our</td>
<td>56%</td>
<td>20%</td>
<td>14%</td>
<td>9%</td>
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<tr>
<td>Creating energy solutions for Canadian</td>
<td>54%</td>
<td>22%</td>
<td>13%</td>
<td>11%</td>
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<tr>
<td>Operating safely</td>
<td>52%</td>
<td>21%</td>
<td>16%</td>
<td>11%</td>
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<td></td>
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<tr>
<td>Preventing spills as much as possible</td>
<td>50%</td>
<td>21%</td>
<td>18%</td>
<td>10%</td>
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<tr>
<td>Managing spills well when they do occur</td>
<td>43%</td>
<td>22%</td>
<td>23%</td>
<td>12%</td>
<td></td>
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<tr>
<td>Having as light an impact on the environment</td>
<td>42%</td>
<td>20%</td>
<td>27%</td>
<td>11%</td>
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<tr>
<td>Doing their part to limit greenhouse gas</td>
<td>40%</td>
<td>22%</td>
<td>24%</td>
<td>14%</td>
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<tr>
<td>Being open about how they do their business</td>
<td>39%</td>
<td>21%</td>
<td>27%</td>
<td>13%</td>
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</table>

National survey, n=1,500, January 22 - 26, 2015

Sets us Apart
Setting CEPA apart:... *the courage to be remarkable*

### Continuum of Sophistication

<table>
<thead>
<tr>
<th>Others</th>
<th>CEPA</th>
</tr>
</thead>
</table>
| • Numerous members  
  • Full spectrum of sophistication – new entrants to super majors  
  • Develop Recommended Practices and hope for adoption – no enforcement  
  • No conditions of membership  
  • Focus - Greater focus on advocacy  
  • Governance – difficult to achieve consensus and drive outcomes | • Few Members  
  • Sophisticated, well-capitalized long-term companies  
  • Integrity First – beyond compliance, continuous improvement, externally verified performance required  
  • Transparency – EAP and transparent reporting  
  • Performance is a condition of membership  
  • Focus - Greater focus on performance and safety  
  • Governance – focused, accountable, decisive |

### Other Associations

- Numerous members
- Full spectrum of sophistication – new entrants to super majors
- Develop Recommended Practices and hope for adoption – no enforcement
- No conditions of membership
- Focus - Greater focus on advocacy
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### CEPA

- Few Members
- Sophisticated, well-capitalized long-term companies
- Integrity First – beyond compliance, continuous improvement, externally verified performance required
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**Expectation:** CEPA is accountable to advance performance, credibility and value for Canadians and its members.
Trust — the critical cornerstone

CREDIBILITY + RELIABILITY + INTIMACY = SELF INTEREST

CREDIBILITY = Technical competence/expertise
RELIABILITY = Perceptions of dependability, consistency and predictability
INTIMACY = Closeness and depth of the relationship/mutual understanding
SELF-INTEREST = Perceived or real: focus on personal gain/power/glory
CEPA/Industry Response
Performance & Continuous Improvement
Transparency, Clarity & Simplicity

Major Initiatives Underway:

1. Governance & External Advisory Panel
2. Integrity First – Performance & External Verification
3. Clarity & Simplicity ~ Common Metrics - Pipeline Safety Trust
4. CEPA About Pipelines Map
5. Performance Reporting – 2016 Reporting
6. Emergency Response Plans
Getting to zero incidents

- Leadership and governance
- CEPA Integrity First® management systems and operating practices
- Safety culture
- Technology and innovation

Performance, Accountability & Transparency
CEPA Governance Structure
CEPA Governance Structure

• Get the Leadership right & set the accountabilities
• Ensure you’re hearing / fully exposed to the messages
  [Know their why...?]
External Advisory Panel (EAP)

Why an External Advisory Panel

• Provide industry leaders with:
  ◦ Direct – unfettered - insights
  ◦ Deepen our understanding of expectations – Performance & Trust
  ◦ Meaningful – powerful – conversations
  ◦ Advice on the development and implementation of Integrity First

• Independently report on IF progress
### External Advisory Panel (EAP)

**Membership in the EAP**

8 - 12 respected critics who possess the background and expertise to assist CEPA

<table>
<thead>
<tr>
<th>Areas of expertise include:</th>
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<tbody>
<tr>
<td>economic and community development</td>
<td>the environment</td>
</tr>
<tr>
<td>Aboriginal people</td>
<td>media and communications</td>
</tr>
<tr>
<td>Labor</td>
<td>municipal leaders</td>
</tr>
<tr>
<td>the academic world</td>
<td>chambers of commerce</td>
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<tr>
<td>other special interest groups</td>
<td>land owners</td>
</tr>
</tbody>
</table>

Broad geographical and subject matter representation
EAP value

Proving extremely valuable in moving forward
CEPA – Industry Improvement Cycle

Industry Performance → ID Gaps (Areas for Industry Improvement) → CEPA

Regulatory & Policy → ID Gaps (Areas for Industry Impact) → CEPA

CEPA

Strategic Continuous Improvement (Leading)

Board Strategy
Integrity First
Safety Culture

Tactical Execution (Proactive/Reactive)

Work Groups
Task Forces
Outreach & Comms

Internal Transparency & Sharing - Critical
(Leading & Lagging KPIs)

External Transparency
• Annual Report
• About Pipelines Map
• RPs, GDs, ERPs, etc.
• CEPA Website(s)
• GR & Comms

Zero Incidents

We Do Not Compete on Safety

aboutpipelines.com
Improving performance & trust

CEPA INTEGRITY FIRST®

An industry-led program driving improvements in:

- Safety
- Environment
- Socio-economic
Integrity First

Principles and priorities

- Safe communities and workplaces
- Minimize impact on the environment and biodiversity
- Create lasting social and economic benefits

PRIORITIES
- Worker safety
- Damage prevention
- Emergency management
- Pipeline integrity
- Control room management
- Pipeline Safety Communications

PRIORITIES
- Land management
- Air emissions
- Water protection
- Wildlife
- Noise

PRIORITIES
- Land use and access
- Economic benefits
- Aboriginal relations
- Workforce

Management Systems Based
Integrity First – development cycle

Management Systems
Continuous Improvement.... through Industry Collaboration
Integrity First – 3rd Party Verification

www.ermcvs.com
Metrics – Understanding Performance
Metrics – Understanding Performance

• Different Jurisdictions
• Many Dialects of Safety
• Differing Definitions:
  • Serious Incidents
  • Significant Incidents
  • Incidents
• Funding Grant to PST – White Paper

Harmonize & simplify to improve understanding
Harmonized Metrics:

Western Regulatory Forum & Canadian Standards Association
‘About Pipelines’ Map

Attributes Currently Displayed:

- Operating company
- Facilities
- Location of the pipeline
- Liquids / gas
- Regulatory agency
- Incident Data
Performance transparency

Committed to safety. Committed to Canadians.

Taking action on our commitment to Canadians

2015 Pipeline Industry Performance Report

2016 Pipeline Industry Performance Report

| aboutpipelines.com

Incidents
Incident reporting

Number of incidents versus significant ** incidents – CEPA members – 2011-2015

Through technological advancements, as well as our industry’s efforts in the areas of leak prevention and detection, only a small percentage of pipeline incidents are severe enough to meet the criteria of significant **. The majority of pipeline incidents are minor, such as small prophets leaks. These minor incidents must be addressed but pose a little risk to the public or the environment.

Incidents per 1,000 kilometres declined

In 2015, our industry saw a decline in the number of natural gas and liquids pipeline incidents per 1,000 kilometres.

Number of incidents per 1,000 kilometres – CEPA members – 2011-2015

121.3 million cubic feet released from natural gas pipelines

Product released from our members’ natural gas pipelines in 2015 totalled more than 121.3 million cubic feet, which is the equivalent of 859,000, 20-pound propane barbeque tanks. In any natural gas pipeline leak, the greatest potential risk to the public or the environment is the chance of ignition and proximity of that to the public.

Natural gas release history – CEPA members – 2011-2015

82%

Metal loss, materials, manufacturing or construction defects, and cracking remain the leading causes of pipeline incidents. Collectively, these accounted for almost 82 per cent of the total incidents over the period 2011-2015.


Canada vs. United States

Frequency of significant pipeline incidents per 1,000 kilometres – Canada vs. United States – 2011-2015

To put Canada’s pipeline safety record into perspective, it can be helpful to compare it to other jurisdictions. The best way to do this is to consider the frequency of pipeline incidents, which compares the number of pipeline incidents per 1,000 kilometres of pipeline. On this scale, Canada’s performance compares favourably with the United States.
Emergency Response Plan

“Making public, principles for the publication of Emergency Response Plans as a critical component of Public confidence”
Critical infrastructure

Transparency

Security

Safety

| aboutpipelines.com
Risk
Security vs. transparency – a real risk

“find a manual valve and operate it. cut off the power to electronic valves. find an emergency shut-off button and press it. test holes? fill them. stakes? pull them. uninstalled pipe laid out? sabotage it. work with a crew you trust, be safe, and don’t talk about it afterwards.”
Changing Face of Accountability

Critical Concepts

- Safety
- Trust
- Accountability
- Risk and benefits
- Security
- Transparency
Changing Face of Accountability

Simplicity, Consistency & Clarity lead to Understanding & Confidence

Transparency Leads to Accountability & Trust

We are all dedicated to Safety
Changing Face of Accountability

Canadian Energy Pipeline Association

QUESTIONS