PiperlinerX: Pipeline Regulation & Standards

Five Interactive Module Series

5 Tuesdays: October 11 – November 8, 2022
(12:00-2:00pm PST, ONLINE Format Only)

Introduction

Today's world needs leaders to identify and respond to workplace challenges which are increasingly complex. Today's world needs leaders who are informed enough to communicate the facts regarding pipelines to any member of the public.

Today's world needs leaders to have wide breadth of interdisciplinary knowledge.

PipelinerX provides leaders with a robust foundational knowledge of pipeline systems and a strong grasp of the issues facing pipelines today – issues ranging from the importance of today's pipeline infrastructure to effective and collaborative indigenous consultation. **PipelinerX** will improve leader's pipeline safety *senses*, through improving their pipeline lifecycle understanding, including 1) how pipelines are designed and constructed, 2) how to use management systems, and 3) how to positively interact with Government and regulatory agencies.

The **PipelinerX** experience brings leaders through five sessions with content ranging from the high-level context of today's infrastructure in Canada to a discussion of many key areas of pipeline design, construction, consultation, and regulation.

More information: https://pii.engineering.ubc.ca/education/short-courses/pipelinerx/

Overview and Outcomes:

Module 1 (Oct. 11, 2022, 12:00-2:00pm PST) is **'No More Pipelines?!?'**
by Tran Mah-Paulson & Ken Paulson

Introduction to pipeline infrastructure in Canada including:
• History
• Canadian/North American Transmission
• Regulatory Environment
• Pipelines in Today's Context

Skills Obtained: Deeper understanding of the integration of pipelines in the Canadian economy and energy supply grid. Additional perspective around the practical implications of emerging issues.

Module 2 (Oct. 18, 2022, 12:00-2:00pm PST) is **'Is It Safe or Will It Explode?'**
by Tran Mah-Paulson & Ken Paulson

Overview of engineering and construction including:
• What is a standard / code?
• Route selection and design safety factors
• Engineering parameters of materials
• How frequently are pipelines actually inspected to prevent leaks?
• How are communities impacted during construction activities?
• What are those construction activities?
- Joining, Installation, Crossings, Testing

Skills Obtained: Appreciation of the extensive engineering controls applied to pipelines during design and construction. Basic understanding of pipeline design and construction.

Module 3 (Oct. 25, 2022, 12:00-2:00pm PST) is **'What..? We Need a System?'**
by Tran Mah-Paulson & Ken Paulson

Overview of pipeline operations including:
• Introduction to Management Systems
• Safety and Loss Management Systems
• Construction Quality Management
• Integrity Management
• Emergency Management
• Security Management

Skills Obtained: Understanding of management systems required for Canadian pipeline systems today - how these systems are connected and their essential role in pipeline safety and environmental protection.

Module 4 (Nov. 1, 2022, 12:00-2:00pm PST) is **'Understanding Consultation'**
by Tran Mah-Paulson & Ken Paulson

Review of obligations and duties in working with Indigenous People including:
• Constitutional Rights
• Canadian Context
• Recent Learnings from Courts
• Challenges and Opportunities

Skills Obtained: Basic understanding of Indigenous consultation from a historical context and how landmark rulings are necessitating rapid changes in the collective understanding of how we can work respectfully with Indigenous Peoples moving forward.

Module 5 (Nov. 8, 2022, 12:00-2:00pm PST) is **'Who Knew – Regulations Are Fascinating!'**
by Tran Mah-Paulson & Ken Paulson

Overview of regulatory context in Canada including:
• Role of Legislation, Regulation, Standards/Codes and Guidance
• Overview of Pipeline Regulation in Canada/US
• Pipeline Permitting/Licensing

Skills Obtained: Understanding of how Governments ensure safety and environmental protection through the extensive regulatory requirements applied to the pipeline sector in Canada. Appreciation of opportunities for regulatory enhancement and approvals and skills necessary to engage productively with Regulators and Government at all levels.

Who Should Attend

PipelinerX is not just for industry experts. The experience is intended to expand the knowledge of participants through a combination of live lectures and collaborative exercises which provides insights and understanding of current practices as well as emerging issues including the growing "debate" around the importance of pipelines in a secure – net zero energy future.

Offered in an interactive virtual setting, this program series is intended for a cohort size of 25 - 30 participants.

Those who want to gain a large breadth of understanding of the pipeline industry will gain the most from this program, including those working in environmental sciences, engineering, land, operations, construction and integrity with regulatory agencies, government ministries, or even the pipeline industry including owners/operators, suppliers, technical staff, and manufacturers.

Courses Format

This series has five **on-line** modules. Start time is 12:00pm PST. Finish time is 2:00pm PST.

Course Objectives

On completion of these five modules, attendees should gain:

- Deeper understanding of the integration of pipelines in Canadian economy and energy supply grid;

- Perspective around practical implications of emerging issues;

- Appreciation of extensive engineering controls applied to pipelines during design and construction;

- Understanding of management systems required for Canadian pipeline systems today – how they are connected and essential role in pipeline safety and environmental protection;

- Basic understanding of Indigenous consultation from a historical context and how landmark rulings are necessitating rapid changes in the collective understanding of how we can work respectively with Indigenous Peoples moving forward;

- Understanding of how Governments ensure safety and environmental protection though the extensive regulatory requirements applied to the pipeline sector in Canada;

- Appreciation of opportunities for regulatory enhancement and approvals and skills necessary to engage productivity with Regulators and Governments at all levels.

Course Registration Fees

- Per module: $170.00 CAD

- All 5 modules: $700.00 CAD

- PII Partners discount: $50 savings when registering for all 5 modules: $650 CAD

COURSE TRAINERS

Ken Paulson has more than 40 years of experience working in the pipeline and oil and gas sector in Canada – as a consultant, an owner/operator and a regulator at both the provincial and Federal levels.
Throughout his career, Ken has been well known within Canada and the US as a staunch supporter

of standardized regulatory approaches across jurisdictions based upon a reliance on national consensus standards like those under ASME and CSA. Ken is a past chair of the ASME Pipeline Systems Division and has chaired a number of global events including IPC as well as the India Oil and Gas Pipeline Conference.

Ken is recently retired as the former Chief Operating Officer of the British Columbia Oil and Gas Commission.

Tran Mah-Paulson is a P.Eng. with a B.Sc. in Civil Engineering from the University of Alberta and an MBA from Queens University. Tran is a welding and materials specialist with extensive experience working on the development of pipeline maintenance and repair programs for pipeline operators and service companies located in Canada, United States, Europe, and India.

Tran's expertise and experience are related to pipeline design, pipeline materials, quality management systems, fabrication shop development and welding, including hot taps and isolations. Tran was the vice-chair of PRCI Design, Materials and Construction and is a member of the CSA Z662 Design and Materials TSC's. Tran is also an YPI Fellow.