

The Canadian Institute's

# WELL & PIPELINE

## Abandonment, Suspension and Reclamation

Ensuring Your Project Strategies are  
Compliant, Efficient and Cost Effective



Hear the latest developments from  
experts from the following organizations:

Ackroyd LLP  
Alberta Institute of Agrologists  
Alberta Transportation  
Alberta Hot Line Inc.  
Axiom Environmental Inc.  
Eclipse  
Ecojustice  
Energy Resources Conservation Board  
Golder Associates Ltd  
HiFi Engineering Inc.  
HydroQual Laboratories Ltd.  
Imperial Oil Limited  
JSK Consulting  
LionHead Engineering  
Meridian Environmental Inc.  
Miller Thomson LLP  
Phasis Consulting  
Priddis Environmental Solutions Ltd.  
Schlumberger  
Shell Canada Products  
University of Waterloo  
Waterloo Environmental Biotechnology Inc.

Discover the latest regulatory, technical and  
operational issues including:

- Best practices in how to **abandon historic wells and pipelines**
- An **innovative fiber optic technology** that helps **find the source of surface casing vent flow and gas leaks**
- Why **community buy-in** is critical before abandoning and discontinuing your facility
- How to **avoid penalties** associated with non-compliance
- Regulatory developments impacting abandonment, suspension and remediation in **Alberta, BC and Saskatchewan**
- The **cost and environmental benefits** of **Phytoremediation**

**Plus!**

Take advantage of detailed instruction in our hands on pre-conference workshop, **Effectively Using Nanomaterials in Environmental Remediation**

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The laws governing abandonment and suspension are now more stringent than ever before. Staying compliant will not only help your company avoid penalties but also avoid negative media publicity and potential law suits.

Inactive wells and pipelines are not only a major financial liability to the province but can pose serious health risks and cause environmental damage.

Be a part of this exclusive gathering and hear from leading professionals on ways to properly and cost effectively manage your abandonment, suspension and reclamation initiatives. Learn about pertinent regulatory updates, government incentives, innovative gas migration tools, cost effective remediation methods and the latest procedures in facility abandonment and decommissioning.

Highlights from this event include:

- A **case study** on the abandonment of Dingman #2, a **historic Canadian well**
- The **latest regulatory updates** on abandonment and discontinuation practices
- Important information about **Alberta Environment's professional sign off criteria**
- Assessing **government incentives** for oil and gas well and pipeline operators
- A case study assessing the **latest technology in gas migration control**

## WHO SHOULD ATTEND:

Presidents, CEOs, VPs, Managers, Directors of Business Development, Strategic Planning, Operations, Production, Engineering, Drilling, Completions, Cementing, and Well and Pipeline Abandonment from:

- Oil and Gas Producers
- Pipeline and Processing Companies
- Drilling and Completions Service Providers
- Energy Focused Engineering and IT companies
- Energy and environmentally focused legal firms
- Provincial and federal regulatory bodies
- Energy-focused industry associations

## HEAR FROM INDUSTRY LEADERS AND SPECIALISTS SUCH AS:

**Debbie Bishop**  
Barrister & Solicitor, Ackroyd LLP

**Sylvia Chan-Remillard, Ph.D**  
Environmental Scientist  
Golder Associates Ltd/HydroQual Laboratories Ltd.

**Kary Cuthill**  
President and CEO, LionHead Engineering

**Sameh Elsayed**  
Senior Environmental Engineer, Alberta Transportation

**Howard Fedorak**  
Section Leader, Liability Management Section  
Corporate Compliance, Energy Resources Conservation Board

**Bruce M. Greenberg, Ph.D**  
Professor, University of Waterloo  
President, Waterloo Environmental Biotechnology Inc.

**Shahul Hameed**  
Technical Manager for Cementing, Schlumberger Canada

**John Hull**  
President, HiFi Engineering Inc.

**Kathleen Kendrick**  
Senior Legal Counsel, Miller Thomson LLP

**David Lloyd**  
CEO, Alberta Institute of Agrologists

**Teresa Meadows**  
Associate, Miller Thomson LLP

**Gary Millard**  
Environmental Geologist, Shell Canada Products

**Peter Miller**  
Barrister and Solicitor, Imperial Oil Limited

**Bettina Pierre-Gilles**  
Phasis Consulting

**Paul Richard**  
President and CEO, Alberta Hot Line Inc.

**Barry Robinson**  
Lawyer, Ecojustice

**Richard Secord**  
Partner, Ackroyd LLP

**Miles Tindal**  
Principal, Axiom Environmental Inc.

**Confirmed Speaker**  
Eclipse, Regulatory Compliance Specialists

**Tim Taylor**  
Principal, Priddis Environmental Solutions Ltd.

**Mike Thygesen**  
President, JSK Consulting

**David R. Williams**  
Senior Principal, Meridian Environmental Inc.

8:00 **Registration and Coffee Served** ☒

9:00 **Opening Remarks from the Conference Chair**

9:15 **Current Regulations Impacting Well and Pipeline Abandonment and Discontinuation Practices**

Richard Secord  
Partner, Ackroyd LLP

Teresa Meadows  
Associate, Miller Thomson LLP

- Update on the latest EUB directives with respect to the abandonment process
- Amendments to Directive 13 and 56 and its effects on the industry
- Examining the current state of the industry:
  - How many wells are being drilled?
  - How many wells and pipelines are being abandoned?
  - How many pipelines are being pulled out?
- How does drilling and abandonment activity impact current and future regulatory changes?
- How have the procedures for restarting a pipeline changed?
- Update on the latest remediation guidelines
- Update on National Energy Board's proposed Damage Prevention Regulations

10:15 **Update on Alberta Environment's Reclamation and Remediation Regulations and How They Affect Industry**

David Lloyd  
CEO, Alberta Institute of Agrologists

David R. Williams  
Senior Principal, Meridian Environmental Inc.

Miles Tindal  
Principal, Axiom Environmental Inc.

*Alberta Environment's role in the abandonment process for upstream oil and gas facilities will be discussed, together with recent changes to the regulatory process for reclamation and remediation work.*

*For all remediation work completed after January 1, 2008, there must be professional sign off.*

- Details of the Professional Declaration for Reclamation Certificate Application form
- Highlighting broad professional points prior to completing the sign off forms considering:
  - Phase 1 environmental site assessments
  - Compliance option checklists for drilling waste disposal
  - Phase 2 environmental site assessments
  - Remediation and confirmatory sampling
  - Reclamation detailed site assessment
- What criteria must the professional abide to before signing off on reclamation and remediation work?
- Professional competence from a regulatory perspective – What is the Alberta Institute of Agrologists doing about competence?
- Errors and Omission Insurance – some considerations for your career
- Update on Tier 1 soil and groundwater remediation guidelines
  - Overview and role of guidelines in well and pipeline remediation
  - Updates on anticipated future direction
- Tier 2 soil and groundwater remediation regulations
  - Potential for using Tier 2 guidelines to optimize remediation costs
  - Data collection strategy to support Tier 2 guideline development
  - Summary of conditions most likely to support favorable Tier 2 guidelines

- Details of the Upstream Oil and Gas Reclamation and Remediation Program
  - Reclamation certificates
  - Reclamation criteria
  - Limitations of liability
  - The applications process – what needs to be done and what forms are required?
  - Drilling waste requirements

11:30 **Networking Coffee Break** ☒

11:45 **Highlighting the Latest Government Incentives for Oil and Gas Well Operators and their Impact on Industry**

Bettina Pierre-Gilles  
Phasis Consulting

*On March 3, 2009, the Alberta Government announced a new three-point royalty stimulus package aimed at increasing drilling in the province. Find out how to take advantage of these incentives and learn how they can help build your company's financial strength amid times of uncertainty.*

- Highlighting the drilling royalty credit program for new oil and gas wells
- Revealing the new incentive program which offers a maximum 5 per cent royalty rate for first year of production for new oil and gas wells
- Details of the \$40 million fund for abandoning and reclaiming old well sites
- Impact of these incentives on the industry

12:00 **How to Best Manage Your Liabilities**

Howard Fedorak  
Section Leader, Liability Management Section  
Corporate Compliance, Energy Resources Conservation Board

- ERCB's proposed policy on well and pipeline abandonment and reclamation initiatives for 2010
- What are ERCB's concerns?
- Highlighting the current programs available
- Assessing the LLR, LFP and other waste management programs and why they are beneficial to the industry
- Why liability management is crucial in ensuring your company meets its financial objectives
- Best practices in liability management

12:45 **Networking Luncheon for Speakers and Delegates** 

2:00 **Finding the Source of Gas Leaks to Mitigate Costs Associated With Leaking Wells and Pipelines**

John Hull  
President, HiFi Engineering Inc.

*A new noise/temperature sensor array technology has been developed that helps find the source of surface casing vent flow and gas leaks. In this session hear about:*

- How does this technology help find the source of gas leaks?
- Properties of fiber optic technology – why is it a better detector?
- A step by step guide to how this technology works
- Why this technology lowers environmental and health risks
- How does this technology help maximize efficiency and lower long-term costs associated with abandonment?
- Practical uses of this technology – where has it been tested what are the results?
- Analyzing competitor technologies in relation to this one and determining the advantages and disadvantages of each
- Identifying the long-term cost savings associated with locating the source of leaks
- Assessing the tools and devices used by leading oil and gas companies
- Gas Migration: Why is it a continuing concern for oil and gas companies and what can be done to overcome this challenge?



2:45 **Best Practices: Cementing Techniques for Cased Hole and Open Hole Abandonment**

- The scope and depth of cementing technology available to the market
- Analyzing the surface casing and vent flow repair techniques preventing gas migration to the surface
- Cement recommendations for specific job criteria available to the market
- Overview of the best practices in abandonment cementing
- Different recommendations for different job criteria
- Quality control checking for cementing: how often do you need to go back to check for leaks?

3:30 **Determining Optimal Line Site Location: Why is This Critically Important?**

Paul Richard

President and CEO, Alberta Hot Line Inc.

- Why proper line site location is the key to ensuring your oil and gas operations run smoothly
- What criteria should be set before hiring third party line locating crew?
- Why has the percentage of line strikes due to insufficient locating practices increased every year?
- How can owners of buried facilities protect themselves from excessive punitive damages?
- What are the latest resources to identify line locations?
- What more should industry, government, educators and line locating contractors do to prevent damage to underground infrastructure?

4:15 **Reclamation: From Start to Finish**

Debbie Bishop

Barrister & Solicitor, Ackroyd LLP

- Analyzing the Environmental Protection and Enhancement Act with regards to reclamation activities
- Updates on security payments for land reclamation and what does this mean for oil and gas companies
- Investigating the inspections criteria with regards to reclamation activities
- Highlighting all aspects of the approvals process with regards to reclamation
  - Filing
  - Notice requirements
  - Review
  - Decision (to issue/refuse) approval
  - Appeal
- Analyzing the cost of reclamation

5:00 **Closing Remarks from the Conference Chair  
Conference Adjourns**

DAY 2 | FEBRUARY 10, 2010

8:30 **Coffee Served**

8:55 **Opening Remarks from Conference Chair**

9:00 **Dingman #2 Well Abandonment: Best Practice  
Abandonment of a Complex Historic Canadian Well**

Kary Cuthill

President and CEO, LionHead Engineering

Sameh Elsayed

Senior Environmental Engineer, Alberta Transportation

- History of Turner Valley and Dingman #2 well
- Government of Alberta's role in the Turner Valley Gas Plant and the well abandonment project
- Highlighting the technical, operational, and community relations challenges
- Best practices for well abandonment
- Lessons learned from this project

10:00 **Determining why Community Buy-In Is Critical  
Before Abandoning and Discontinuing Your Facility**

Barry Robinson

Lawyer, Ecojustice

- Presentation of a case study of a landowner's attempt to resolve abandonment and reclamation issues
- What are landowners' concerns about well and pipeline abandonment and reclamation initiatives?
- How open communication between landowners' and companies can alleviate potential legal battles and negative media publicity
- Highlighting the benefits of involving landowners and the public around well and pipeline abandonment procedures

10:45 **Networking Coffee Break**

11:00 **Update on Remediation Regulations and  
Analyzing the Benefits of Phytoremediation**

Gary Millard

Environmental Geologist, Shell Canada Products

Bruce M. Greenberg, Ph.D

Professor, University of Waterloo

President, Waterloo Environmental Biotechnology Inc.

- Analyzing the Alberta Environmental Protection and Enhancement Act and associated guidelines with regards to remediation activities
- Outlining remediation options, from in situ to ex situ, and associated benefits and problems
- Analyzing the cost of remediation
- Examining the use of phytoremediation as an on-site remediation option for well and pipeline sites
- Assessing the benefits of phytoremediation:
  - No soil deposit costs
  - Reduced green house gas emissions
  - Reduced risk to health and safety
  - Increased soil fertility

12:00 **Networking Luncheon for  
Speakers and Delegates**

1:15 **Assessing the Regulatory Framework in BC  
and Saskatchewan**

Confirmed Speaker

Eclipse, Regulatory Compliance Specialists

Kathleen Kendrick

Senior Legal Counsel, Miller Thomson LLP

- What measures are the provincial governments taking to ensure proper abandonment and suspension of wells and pipelines?
- Highlighting the incentives offered in these provinces and benefits to oil and gas companies
- Outlining opportunities for well and pipeline operators in these provinces
- Assessing the future of the industry in BC and Saskatchewan

2:15 **Penalties Associated with Not Complying with  
Government Regulations and Key Steps to  
Secure Your Company from Liability**

Peter Miller

Barrister and Solicitor, Imperial Oil Limited

- How to prepare your company for surprise audits: Key steps to ensure you are meeting compliance initiatives
- Highlighting all possible consequences of non-compliance
- Understanding the various penalties for not complying with regulations
- Comparing provincial policies regarding gas leaks and determining which province has the most lenient policies

- What is a company's long-term liability for their wells following regulatory changes in the last two years?
- What should companies expect in the future?

### 3:00 Networking Coffee Break ☕

### 3:15 Highlighting the Latest Procedures in Facility Abandonment and Decommissioning

**Mike Thygesen**  
President, JSK Consulting

**Tim Taylor**  
Principal, Priddis Environmental Solutions Ltd.

- Understanding the importance of pre-planning in facility abandonment and decommissioning
- Update on the latest health and safety regulations around abandonment and decommissioning of facilities
- Proactive vs reactive approach to decommissioning
- Assessing ways to develop attainable cleanup criteria based on long-term use of sites
- Evaluating the uses of waste streams generated from cleaning and decontamination activities
- Streamlining decommissioning and remediation and identifying the associated cost savings
- How to manage time and budget when decommissioning facilities

### 4:15 Assessing the Latest Technologies in Gas Migration Control

**Shahul Hameed**  
Technical Manager for Cementing, Schlumberger Canada

- Discussing the practical applications of this technology
- How to use the Gas Migration Control Engineering Suite
- How does it provide long-term cost savings for oil and gas operators?
- What are the added advantages of using this technology?
- How is this technology unique from competitor technologies in the marketplace?
- Which organizations have implemented this software and have they seen results?

### 5:00 Closing Remarks from the Conference Chair Conference Adjourns

## SPONSORSHIP & EXHIBITION OPPORTUNITIES

Maximize your organization's visibility in front of key decision-makers in your target market. For more information, contact Senior Business Development Executive **Mike McCarthy** at 416-927-0718 ext. 302, toll-free 1-877-927-0718 ext. 302 or by email at [m.mccarthy@CanadianInstitute.com](mailto:m.mccarthy@CanadianInstitute.com)

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### EFFORTS

- ✓ We print all brochures with The Canadian Institute's Environmentally Tri-Certified (FSC, PEFC, SFI) Print Partner
- ✓ We have reduced paper print and use by more than 25% over the past year
- ✓ We provide webcast options for individuals unable to travel to our events
- ✓ We encourage our delegates to recycle their conference badges



## PRE-CONFERENCE WORKSHOP

FEBRUARY 8, 2010

1:30 p.m – 5:00 p.m (Registration opens at 1:00 pm)

### Effectively Using Nanomaterials in Environmental Remediation

**Sylvia Chan-Remillard, Ph.D**  
Environmental Scientist  
Golder Associates Ltd / HydroQual Laboratories Ltd.

*Nanotechnology is the science of manipulation of matter at the atomic or molecular level, at dimensions of roughly 1 to 100 nanometers, creating products with novel or enhanced functionalities that differ significantly from bulk counterparts and naturally occurring materials. Nanotechnology is a rapidly emerging field that encompasses virtually every science and has technological applications ranging from biomedical applications to environmental remediation.*

*Despite the current economic downturn, oil giants like Exxon Mobile estimate that due to increasing worldwide population growth and economic outputs there is going to be a 35% increase in the demand for energy within the next 25 years, with oil comprising a large percentage of global energy supplies. In addition to the increased demand for energy supplies, there is also the parallel increase in demand for fresh water supply.*

*On the other side of this issue, there is public demand to develop cleaner and more efficient production and remediation technologies in the oil and gas industry. These are key issues that the oil industry will be facing in the near future. Nanotechnology may hold the key to solving these and other key issues that the oil and gas industry faces.*

*Attend this half-day workshop and learn about the following issues, with a specific focus on oil well and pipeline abandonment, suspension and reclamation:*

- Nanotechnology fundamentals: An overview of what nanotechnology is, why is it important and some broader applications of nanotechnology
- Current applications of nanotechnology within the oil and gas industry (e.g. heavy metal decontamination, nanofiltration on decontamination of oilsands waste, waste stream treatment, remediation of toxic materials from underground storage tanks, development of more resistant materials for plugging abandoned wells)
- Future applications of nanotechnology within this industry (e.g. Green technologies, long term sustainability of water resources, site decontamination, clean energy, contaminant sensor technologies)
- Commercial benefits of nanotechnology (e.g. Green technologies, Clean Energy)
- Economic impact of nanotechnology: How can the use of nanotechnology impact bottom line?
- Environmental implications (e.g. remediation/reclamation technologies)
- The regulatory atmosphere surrounding nanotechnology – a global perspective
- Public perception and societal concerns (environment and human health)

### PARTNERS



The Canadian Institute, in partnership with Zerofootprint, is pleased to announce a program that will allow attendees to contribute to the reduction of carbon emissions associated with our events. For only \$5 you can offset your contribution and support tire recycling projects in Canada. For more information visit [www.zerofootprint.net](http://www.zerofootprint.net)

- ✓ We also work very closely with all conference venues to reduce, reuse and recycle

Register at 1-877-927-7936 or [www.CanadianInstitute.com/Abandonment](http://www.CanadianInstitute.com/Abandonment)

The Canadian Institute's

# WELL & PIPELINE

## Abandonment, Suspension and Reclamation

Ensuring Your Project Strategies are Compliant, Efficient and Cost Effective



- ✓ Maximize your company's bottom line by learning about the latest procedures in gas migration control
- ✓ Avoid penalties associated with not complying with government regulations
- ✓ Hear about cost effective and environmentally friendly remediation methods
- ✓ Get the latest on government incentives for oil and gas well and pipeline operators
- ✓ Learn about ways to secure your company from liability

### REGISTRATION FORM

To expedite your registration, please mention your Priority Service Code

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1329 Bay Street  
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**YES! Please register the following delegate for Well & Pipeline Abandonment, Suspension and Reclamation**

For group discounts please call 1-877-927-7936

FEE PER DELEGATE	Register & Pay by January 12, 2010	Register & Pay after January 12, 2010
<input type="checkbox"/> Conference (on site)	\$1895 + 5% GST = \$1989.75	\$2095 + 5% GST = \$2199.75
<input type="checkbox"/> Conference + Workshop	\$2390 + 5% GST = \$2509.50	\$2590 + 5% GST = \$2719.50
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STEP 1

#### CONTACT DETAILS

NAME	POSITION
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STEP 2

#### PAYMENT

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I have enclosed my cheque for \$ \_\_\_\_\_ including GST made payable to **The Canadian Institute** (GST No. 84221 1153 RT0001)

STEP 3

Wire Transfer (\$CAD)

Please quote the name of the attendee(s) and the conference code 390W10 as a reference.  
Beneficiary: **The Canadian Institute**  
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Address: 150 Bloor St, Suite M100, Toronto, ON  
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VENUE: THE FAIRMONT PALLISER  
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#### Hotel Reservations

For information on hotel room availability and reservations, please contact The Fairmont Palliser at 1-866-540-4477. When making your reservation, please ask for "The Canadian Institute's Corporate Rate".

#### Program Materials

Conference participants will receive a comprehensive set of conference materials prepared by the speakers, as an excellent reference source after the conference. If you have paid and are unable to attend, the conference materials will be shipped to you upon request only. Request must be received within 30 days upon conclusion of the conference.

#### Payment Policy

Payment must be received in full by the conference date to ensure admittance. All discounts will be applied to the Conference Only fee (excluding add-ons), cannot be combined with any other offer, and must be paid in full at time of order. Group discounts available to individuals employed by the same organization.

#### Cancellation and Refund Policy

You must notify us by email at least 48 hrs in advance if you wish to send a substitute participant. Delegates may not "share" a pass between multiple attendees without prior authorization. If you are unable to find a substitute, please notify **The Canadian Institute** in writing no later than 10 days prior to the conference date and a credit voucher will be issued to you for the full amount paid. Credit Vouchers are valid for 1 year and are redeemable against any other conference by **The Canadian Institute**. If you prefer, you may request a refund of fees paid less a 25% service charge. No credits or refunds will be given for cancellations received after 10 days prior to the conference date. **The Canadian Institute** reserves the right to cancel any conference it deems necessary and will, in such event, make a full refund of any registration fee, but will not be responsible for airfare, hotel or other costs incurred by registrants. No liability is assumed by **The Canadian Institute** for changes in program date, content, speakers or venue.

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