

RemTech 2022 Agenda (Overview)

Tuesday, October 11

	Conference Centre, 2nd Level
16:00 - 19:00	Registration Open & Exhibitor Move In

Wednesday, October 12

	Conference Centre, 2nd Level Foyer			
09:00 - 17:30	Registration			
09:00 - 11:30	Exhibitor Move In continues			
	Shaughnessy			
09:30 - 11:30	Indigenous Awareness and Inclusion Workshop			
	Van Horne Ballroom and President's Hall			
11:30	Exhibits Open and Light Lunch			
	Theatre	Coleman	Beatty	Shaughnessy
12:00 - 16:50 (see detailed program for exact times for each stream)	PTAC Reclamation and Remediation Research Update	In-Situ Treatment and Management	Natural Attenuation	Legal / Regulatory
		Research and Technology	Risk Management	Emerging Contaminants
	Van Horne Ballroom and Exhibit Area			
16:30 - 17:00	Pre-Reception Mixer with the Exhibitors			
	Terrace (outside Rundle Lounge)			
17:00 - 19:00	Game On! Tailgate Reception			

About the Host



Established in 1987, the Environmental Services Association of Alberta (ESAA) is one of Canada's leading business associations with close to 250 member companies. Dedicated to building a strong

environmental industry, ESAA is an industry association with a business approach in providing programs that lead to its member's corporate success.

Visit our website for more information. www.esaa.org

Thursday, October 13

	Van Horne Ballroom		
07:00 - 19:00	Registration Open		
07:30 - 08:30	Networking Breakfast		
08:30 - 08:40	Opening Remarks/Welcome		
	Van Horne Ballroom		
08:40 - 09:40	Keynote Presentation and Discussion		
	Coleman	Beatty	Shaughnessy
10:00 - 12:15	In-Situ Treatment and Management	Interesting Projects	Risk Management
	Van Horne Ballroom		
12:15 - 13:50	Lunch and Keynote Presentation		
	Coleman	Beatty	Shaughnessy
14:00 - 15:05	Groundwater	Interesting Projects	Bioremediation
15:10 - 16:50	Miscellaneous		
	Van Horne Ballroom		
16:45 - 19:00	Networking Reception – The Magic of RemTech		

Friday, October 14

	Van Horne Ballroom		
07:00 - 14:00	Registration Open		
07:30 - 08:30	Networking Breakfast		
08:00 - 08:30	A Conservation Update from The Wilder Institute		
	Coleman	Beatty	Shaughnessy
08:30 - 10:10	Natural Attenuation of Petroleum NAPLs (NSZD)	Indigenous Engagement and Consultation	Alberta Environment and Alberta Energy Regulator Updates
10:40 - 12:20		Business Growth and Support	
	Van Horne Ballroom		
12:20 - 14:20	Lunch and Closing Keynote		

RemTech 2022 Agenda (Detailed)

Tuesday, October 11

16:00 - 19:00	Registration & Exhibitor move-in Conference Centre, 2nd Level Foyer
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Wednesday, October 12

09:00 - 17:30	Registration Conference Centre, 2nd Level Foyer
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09:00 - 11:30	Exhibitor move-in Conference Centre, 2nd Level Foyer
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09:30 - 11:30	Indigenous Awareness and Inclusion Workshop Shaughnessy
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11:30	Exhibits Open and Light Lunch Van Horne Ballroom and Presidents Hall
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Theatre

	PTAC Reclamation and Remediation Research Update
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12:00 - 12:30	PTAC RRC Over Presentation Allan Fogwill, PTAC Wellsite Groundwater Metals – Best Management Practices Miles Tindal, Millennium EMS Solutions
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	5 minute transition
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12:35 - 13:05	Numerical Modelling Approaches – Best Management Practices Miles Tindal, Millennium EMS Solutions Re-Evaluation of F2 and F3 Petroleum Hydrocarbon Management Limits Miles Tindal, Millennium EMS Solutions and Simone Levy, InnoTech Alberta
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	5 minute transition
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13:10 - 13:40	AB Background Soil Metals and Salinity Database and Analysis Tool Natalie Shelby-James and Simone Levy, InnoTech Alberta Paul Fuellbrandt, Statvis Analytics
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13:40 - 14:00	Networking Break President's Hall
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14:00 - 14:30	Evaluation of Reclamation Practices on Forested Upland and Peatland Well Sites Natalie Shelby-James, InnoTech Alberta
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	5 minute transition
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14:35 - 15:05	Low Probability Receptor – Overview and Benefits and Analysis of Net Environmental Benefit Ian Terry, Millennium EMS Solutions
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	5 minute transition
15:10 - 15:40	Development of a Long-Term Chloride Water Quality Guideline Incorporating Harness-Modifying Factors Tony Knafla, Equilibrium Environmental Agronomic Receptor Evaluation for Direct Soil Contact Ian Mitchell, Millennium EMS Solutions Ltd.
	5 minute transition
15:45 - 16:15	Finalization of Research and Preliminary Selenium Soil Quality Guideline Derivation Tony Knafla, Equilibrium Environmental
	5 minute transition
16:20 - 16:50	PTAC RRRC Q & A Session
Coleman	
	In-Situ Treatment and Management
12:00 - 12:30	(A) Highly Sustainable Active Remedial Tool for Degrading Petroleum and Chlorinated Contaminants, Even in Clay Formation Eric Vonde, Advanced Environmental Technologies
	5 minute transition
12:35 - 13:05	(The) Successful In-Situ Treatment of a TCE Plume Using a Combination of Reduction, Sorption, and Anaerobic Bioremediation Rick McGregor, InSitu Remediation Services Ltd.
	5 minute transition
13:10 - 13:40	In-Situ Chemical Treatment for Reduction of Dissolved Arsenic Concentrations near an Active Spur Line in Burnaby, BC Jason Christensen, Keystone Environmental
13:40 - 14:00	Networking Break President's Hall
	Research and Technology
14:00 - 14:30	Development of an Extraction Method for Estimating Phytoaccessible Fractions of Bromacil and Tebuthiuron Jackie Maxwell, University of Alberta
	5 minute transition
14:35 - 15:05	Refining Drilling Waste Compliance Option Calculations for Salts and DSTs: a Collaborative PTAC Project Jim Purves, North Shore Environmental Consultants Inc. Michelle Taylor, Waterline Resources
	5 minute transition

15:10 - 15:40	Digital Tools and Solutions to Power Your Sampling Programs to Save Time and Money Joshua Dias, Bureau Veritas
	5 minute transition
15:45 - 16:15	Hazardous Site Access using Robots Craig Milne, Copperstone Technologies
	5 minute transition
16:20 - 16:50	Brook Trout Environmental DNA Detections Comparable to Two Conventional Methods in Southern Ontario Creeks Danielle Bourque, SLR Consulting Ltd. (Canada)
Beatty	
	Natural Attenuation
12:00 - 12:30	Seasons of Change: NSZD Rates Across Nine Sites using New High-data Density Technology Steven Mamet, Environmental Material Sciences Inc.
	5 minute transition
12:35 - 13:05	Effectiveness of Early Actions in Accelerating a Harbor-Wide Monitored Natural Recovery Remedy in Esquimalt Harbour Robert Thomas, Public Services and Procurement Canada
	5 minute transition
13:10 - 13:40	Shifting from Tradition: A Long Term NSZD Monitoring Approach for an Active Oil and Gas Facility in Saskatchewan Amy Jimmo, Environmental Material Science, Inc.
13:40 - 14:00	Networking Break President's Hall
	Risk Management
14:00 - 14:30	Down and Dirty About Excess Soil Matthew Gardner, Willms & Shier Environmental Lawyers LLP Drew Chevalier, Ausenco Sustainability Inc.
	5 minute transition
14:35 - 15:05	Using a Risk-Based Approach to Achieve Net Environmental Benefit During Derailment Remediation Kristjana Zoras, GHD
	5 minute transition
15:10 - 15:40	Site-Specific Risk Assessment as a Cost-Effective step in achieving Regulatory Closure at a Former Gas Plant in Northern Alberta Masten Brolsma, Advisian
	5 minute transition

15:45 - 16:15	<p>Plant Uptake of Petroleum Hydrocarbons and Trace Metals and Derivation of Soil-to-Plant Uptake Factors : Advancing the Science of Environmental Risk Assessment</p> <p>Erik Martin, Vertex Resource Group Ltd. James Walker, Mount Royal University</p>
	5 minute transition
16:20 - 16:50	<p>Contaminant Management Plans as an Effectual Tool for Environmental Assessment and Regulatory Compliance</p> <p>Stephanie Drake and Jeff Seaman, Trace Associates Inc..</p>
Shaughnessy	
	Legal / Regulatory
12:00 - 12:30	<p>Oilfield Waste Characterization and Classification in Western Canada</p> <p>Sherry Kenneway, Canadian Natural Resources Limited</p>
	5 minute transition
12:35 - 13:05	<p>There's Been a Spill, Now What? Legal Requirements for Responding to a Spill – Part 1</p> <p>Jacquelyn Stevens and John Georgakopoulos, Willms & Shier Environmental Lawyers LLP</p>
	5 minute transition
13:10 - 13:40	<p>There's Been a Spill, Now What? Legal Requirements for Responding to a Spill – Part 2</p> <p>Jacquelyn Stevens and Anand Srivastava Willms & Shier Environmental Lawyers LLP</p>
13:40 - 14:00	Networking Break Van Horne Ballroom and President's Hall
14:00 - 14:30	<p>CER Remediation Process Guide and Remediation Operating Practices Update</p> <p>Adele Houston and Holly Kingston, Canada Energy Regulator</p>
	5 minute transition
	Emerging Contaminants
14:35 - 15:05	<p>Foam Fractionation for PFAS Removal: Leveraging the Physiochemistry of PFAS Against Itself</p> <p>Paul Newman, ECT2</p>
	5 minute transition
15:10 - 15:40	<p>PFAS Contaminated Site Portfolio Risk Ranking for the Purpose of Funding Prioritization</p> <p>David Tarnocai, SNC-Lavalin Inc.</p>
	5 minute transition
15:45 - 16:15	<p>STAR and STARx – A Smouldering Solution to PFAS from Laboratory to Field</p> <p>Laura Kinsman, Savron</p>

	5 minute transition
16:20 - 16:50	<p>Discovery and Tracking of a Novel Sulfolane-Degrading Bacterium through Laboratory and Field Studies</p> <p>Phil Dennis, SiReM Linda Eastcott, Imperial Oil</p>
16:30 - 17:00	<p>Pre-Reception Mixer with the Exhibitors</p> <p>Exhibit Area</p> <p>Join the exhibitors for a complimentary drink and light snacks.</p>
17:00 - 19:00	<div style="display: flex; justify-content: space-between;"> <div style="text-align: center;">  <p>Reception Sponsor</p>  </div> <div style="text-align: center;"> <p>Silent Auction Sponsor</p>  </div> <div style="text-align: center;"> <p>Drink Ticket Sponsor</p>  </div> </div> <p style="text-align: right;">Tailgate Reception</p> <p>Join us outside for a selection of tailgate inspired foods. Wear your favourite jersey and join us for dinner at the Tailgate Party.</p>

Thursday, October 13

07:00 - 19:00	<p>Registration</p> <p>Conference Centre, 2nd Level Foyer</p>
07:30 - 08:30	<p>Networking Breakfast</p> <p>Van Horne Ballroom</p>
08:30 - 08:40	<p>Opening Remarks and Welcome</p> <p>Van Horne Ballroom</p> <p>Fred Keating, MC Rob Traynor, SLR Consulting, ESAA President</p>

08:40 - 09:40	Keynote Presentation and Discussion Van Horne Ballroom
	 <p>Keynote Presentation and Discussion</p> <p>The Canon and the Trade: How Editors, Booksellers, Publishers, and Other Bookish Types Helped Craft the Environmental Movement in North America</p> <p>Mark Hineline, Author, Former Professor Lyman Briggs College, Michigan State University</p> <p>Sponsored by</p> 
09:40 - 10:00	Networking Break Van Horne Ballroom and President's Hall
Coleman	
	In-Situ Treatment and Management
10:00 - 10:30	Remediating Bedrock: What Once Was Impossible Is Now Routine. Three Case Studies Kevin French, Vertex Environmental Inc.
	5 minute transition
10:35 - 11:05	Innovative In-Situ Remediation Approach to Treat PFAS-Impacted Groundwater (Pilot Scale Design and Implementation) Matt Pourabadehei, SNC-Lavalin
	5 minute transition
11:10 - 11:40	Emergency Response and Remediation of a Crude Oil Release in Abbotsford, BC Kristjana Zoras, GHD
	5 minute transition
11:45 - 12:15	In-Situ Permeable Reactive Barrier Remediation Optimization using High Resolution Site Characterization Tools – A Case Study Patrick O'Neill, Vertex Environmental
Beatty	
	Interesting Projects
10:00 - 10:30	TC Energy Peace River Mainline Abandonment Project Darcy Bye, TC Energy Jenna Rode, Trace Associates
	5 minute transition

10:35 - 11:05	Use of Thermal Infrared (TIR) Imagery to Identify Groundwater Discharge Areas Associated with Known Groundwater Contaminants of Potential Concern Part I: Mapping Sami Morgan and Jennifer Collins, Matrix Solutions
	5 minute transition
11:10 - 11:40	Design and Implementation of a Source Control Program for PFAS at the Fire Fighting Training Area (FFTA), CFB Comox, Comox BC Korene Torney, SLR Consulting (Canada) Ltd
	5 minute transition
11:45 - 12:15	Site Restoration of a Remediation Excavation in a Sensitive Site Setting – Columbia National Wildlife Area, an Update Kate Lindfield, SLR Consulting (Canada) Ltd.
Shaughnessy	
	Risk Management
10:00 - 10:30	Gaps and Uncertainties Associated with PAH Soil Quality Guidelines in Canada and Challenges with Human and Ecological Risk Assessment Karl Bresee, Intrinsic Corp.
	5 minute transition
10:35 - 11:05	Incorporating Climate Change Impacts to Contaminated Site Liability Indra Kalinovich, Dillon Consulting Limited
	5 minute transition
11:10 - 11:40	Risk Assessment and Phytoremediation: Multipronged Approach to Evaluate and Address Potential Macronutrient Impact on a River Tawnya Anderson, Nichols Environmental (Canada) Ltd. Karen Bechard, Geosyntec Consultants
	5 minute transition
11:45 - 12:15	Upcycling the Ashes for Sustainable Management of Soil Contaminants Jongho Won and Jevins Waddell, TRIUM Environmental Inc.



Andrew Underwood, InnoTech Alberta

12:15 - 13:50	Lunch and Keynote Presentation Van Horne Ballroom
	<div style="display: flex; align-items: center;">  <div> <p>Lunch and Keynote Presentation</p> <p>Thriving in an Uncertain World Dr. Dave Williams, Former Canadian Shuttle Astronaut and Aquanaut</p> </div> </div> <p style="text-align: center; margin-top: 20px;">Sponsored by</p> <div style="text-align: center;">  <p>Matrix Solutions Inc. ENVIRONMENT & ENGINEERING</p> </div>
13:50 - 14:00	Networking Break Van Horne Ballroom and President's Hall
Coleman	
Groundwater	
14:00 - 14:30	Fractured Bedrock Characterization in the Foothills of Alberta – Old Sites, New Ideas Tim Van Dijk and Amit Sharma, Matrix Solutions Inc.
	5 minute transition
14:35 - 15:05	Cleanup of a Daylighted Gasoline Release in a Sand Filled Tank Hold Utilizing Total Fluid Recovery Surfactant Enhanced Extraction (SEE) George A. Ivey, Ivey International Inc.
	5 minute transition
Miscellaneous	
15:10 - 15:40	Who's Responsible? Innovative Approaches to Apportioning Salinity Plumes Brent Lennox, Waterline Resources Inc.
	5 minute transition
15:45 - 16:15	Discerning Recent and Historical Spill Material using European Standard EN 155522-2:2020 Detlef Birkholz, D.A. Birkholz, Analytical Consultant, Inc. John Davis, Gibson Energy
	5 minute transition
16:20 - 16:50	Remediation of the Gunnar Uranium Site – It's History and Progress to Date Alexey Klyashtorin and Skye Muirhead, Saskatchewan Research Council

Beatty	
	Interesting Projects
14:00 - 14:30	Soil Sterilant Remediation at Utility Sites Jason Pentland and Monica Brightwell, ATCO Utilities
	5 minute transition
14:35 - 15:05	Field-Scale Research Trial to Demonstrate Ex Situ Remediation of Bromacil in Soil Sarah Thacker, InnoTech Alberta
	5 minute transition
15:10 - 15:40	Weather, Staff and Equipment; a Trifecta of Success for Closure Work on Remote Winter Access Sites Jeff Biegel, 360 Energy Liability Management Rob Thompson, Orphan Well Association
	5 minute transition
15:45 - 16:15	Underwater Noise Impacts from Remediation Dredging: Best Practices and Mitigation Alternatives Jonathan Vallarta, SLR Consulting (Canada) Ltd
	5 minute transition
16:20 - 16:50	Toxicity of Weathered Petroleum Hydrocarbons Fraction 3 in Field Subarctic Soils to Soil Invertebrates Amy Gainer, Advisian Adrian Pang, Royal Military College of Canada
Shaughnessy	
	Bioremediation
14:00 - 14:30	How are Nitrogen Compounds Attenuating at Your Site? Implications for Site Remediation and Climate Change Phil Dennis, SiREM
	5 minute transition
14:35 - 15:05	Enhanced Bioremediation of Contaminated Soils using Sustainable Soil Amendments Jean Pare, Chemco



Joanna Choczynska, Parsons

	5 minute transition
15:10 - 15:40	Bioremediation – Eliminating the Entire Spectrum of Hydrocarbons Through a One-time Application Myles Ethier, Long Chain Reclaim Ltd.
	5 minute transition
15:45 - 16:15	In Field Study Evaluating Rates of TCE Biotransformation Using Carbon-Based Biostimulation Additive Alone vs. Erdenhanced Combined with Zero Valient Iron (ZVI) Kent Armstrong, TerraStryke Products LLC
	5 minute transition
16:20 - 16:50	Evaluating Routine Groundwater Parameters to Determine Site Specific Biostimulatory Formulations for Hydrocarbon Remediation Amy Jimmo, University of Saskatchewan
16:45 - 19:00	Networking Reception Van Horne Ballroom



David Fitzpatrick, Veolia



Networking Reception

The Magic of RemTech

Join us for a magic show featuring the incredible magic of Sheldon Casavant. Refreshments and snacks provided. At the end of the show, the reception will continue in the exhibit area, featuring a selection of foods and desserts and Sheldon will be roaming and performing close-up magic tricks.

Reception sponsor



Drink Ticket sponsor



Silent Auction sponsor



Friday, October 14

07:00 - 14:00

Registration

Conference Centre, 2nd Level Foyer

07:30 - 08:30

Networking Breakfast

Van Horne Ballroom

08:00 - 08:30



Special Presentation

Allison Scovill

The Wilder Institute (Calgary Zoo)

A Conservation Update from
The Wilder Institute

Breakfast sponsor



Coleman	
	Natural Attenuation of Petroleum NAPLs (NSZD)
08:30 - 09:00	Correcting Common Misperceptions about Natural Source Zone Depletion Andy Pennington, Arcadis
	5 minute transition
09:05 - 09:35	Natural Source Zone Depletion of DNAPL: Is It A Thing? Matt Rousseau, GHD
	5 minute transition
09:40 - 10:10	New ASTM Standard Guide for Estimating Natural Attenuation Rates for NAPL in the Subsurface Parisa Jourabchi, ARIS Environmental
10:10 - 10:40	Networking Break President's Hall
10:40 - 11:10	Distinguishing Noise from Signal in the Measurement of Natural Source Zone Depletion (NSZD) Rates at Petroleum Contaminated Sites Julio Zimbron, E-Flux, LLC
	5 minute transition
11:15 - 11:45	Estimating Time to Reach NSZD Endpoints – Using Active Remediation Analogs Rick Ahlers, GEI Consultants
	5 minute transition
11:50 - 12:20	Cumulative Effect of NSZD through Compositional Analysis Liz Haack, bp Remediation Management
Beatty	
	Indigenous Engagement and Consultation
08:30 - 09:00	Indigenous Engagement in Northern Construction Projects Rob Yeomans, Parsons Jesse George, CIRNAC
	5 minute transition
09:05 - 09:35	ESG & First Nation Inclusion Jeremy Cheyne, West Earth Sciences Ltd
	5 minute transition
09:40 - 10:10	Supporting Indigenous Communities in Protection of Rights and the Environment Melanie Daniels, Louis Bull Tribe Michelle Cotton, Solstice Environmental Management
10:10 - 10:40	Networking Break President's Hall

	Business Growth and Support
10:40 - 11:10	Prompt Payment and Construction Lien Act and its Impact Environmental Consultants' Business Sean Parker, McLennan Ross
	5 minute transition
11:15 - 11:45	Fostering R-E-S-P-E-C-T in the Environmental Workplace Michelle Heffernan, Trace Associates Inc.
	5 minute transition
11:50 - 12:20	ESG, An Introduction to the Current State of the Movement Randy Neumann, Element
Shaughnessy	
	Alberta Environment and Alberta Energy Regulator Updates
08:30 - 09:00	AER: Overview of AER Record of Site Condition (RoSC) Sara Blacklaws, Adrian Kerry and Matthew Stewart Alberta Energy Regulator
	5 minute transition
09:05 - 09:35	Highlights of RoSC Data Analytics Sara Blacklaws, Adrian Kerry and Matthew Stewart Alberta Energy Regulator
	5 minute transition
09:40 - 10:10	Supplemental Guidance on Site-Specific Risk Assessments in Alberta Chris Chalk, Norman Sawatsky and Premeer Mohamed Alberta Environment and Parks
10:10 - 10:40	Networking Break President's Hall
10:40 - 11:10	Guide to Excluding the Domestic Use Aquifer Based on Municipal Bylaws Chris Chalk, Norman Sawatsky and Premeer Mohamed Alberta Environment and Park
	5 minute transition
11:15 - 11:45	Tier 1 and Tier 2 Updates Chris Chalk, Norman Sawatsky and Premeer Mohamed Alberta Environment and Park
	5 minute transition
11:50 - 12:20	Q & A Session with Alberta Energy Regulator and Alberta Environment and Parks Presenters

12:20 - 14:20

Lunch and Closing Keynote
Van Horne Ballroom



Lunch and Closing Keynote

Inspiring Canadians at Home and Abroad

Peter Mansbridge, Former Chief Correspondent for CBC News and Anchor of *The National*

Sponsored by



Daniel Danehy, Langan International



Tinsae Alemu, Trace Associates

