RPIC Real Property Institute of Canada | IBIC Institut des biens immobiliers du Canada

Federal Contaminated Sites Hybrid Workshop / Atelier hybride sur les sites contaminés fédéraux

Tuesday, Jun 25: Wayne Gretzky Ballroom **06:00 PM - 07:00 PM**

Welcome Reception

Wayne Gretzky Ballroom

Wednesday, Jun 26: Foyer **08:00 AM - 05:00 PM**

Registration

Foyer

Wednesday, Jun 26: Foyer & Wayne Gretzky Ballroom A **08:00 AM - 09:00 AM**

Breakfast

Foyer & Wayne Gretzky Ballroom A

Wednesday, Jun 26: Wayne Gretzky Ballroom **09:00 AM - 10:30 AM**

Opening Remarks & Opening Panel: Tse Zul (Faro Mine) - From Reclamation to Reconciliation

Wayne Gretzky Ballroom

Derrick Redies
VP Business Development, Dena Nezziddi Development Corporation

Jordan Cummer
Community Engagement Officer|Faro Mine Remediation Project, CIRNAC

Kim Redies
CEO, Dena Nezziddi Development Corporation

Lou Spagnuolo
Strategic Advisor - Mine Reclamation, Parsons

Before mining commenced in the late 1960's, the Ross River Dena Council members used the Faro mine area, historically known as Tse Zul, for subsistence. Ross River Dena Council members view the operation of the Faro Mine as a symbol of colonial injustices inflicted on them and impacting their way of life. Today, the reclamation project has become an important mechanism for ensuring that some of these injustices are confronted and that Indigenous people can begin to see healing while benefiting from the remediation and closure of the site. Our presentation will discuss the complex and challenging work of utilizing …

Wednesday, Jun 26: Foyer & Wayne Gretzky Ballroom A **10:30 AM - 11:00 AM**

Break & Exhibit Hall

Foyer & Wayne Gretzky Ballroom A

Wednesday, Jun 26: Jari Kurri A **11:00 AM - 11:30 AM**

Climate Change Impacts on Active Zone Groundwater Dynamics at BAF-3 Long Range Radar Station, Brevoort Island, Nunavut

Jari Kurri A Climate Change

Jeffrey McKenzie
Professor - Earth and Planetary Sciences, McGill University

Tom Macneil
Business Center Practice Leader, Environmental Services, Stantec Ltd.

Stantec was retained by Public Services and Procurement Canada (PSPC) and Department of National Defence (DND) to complete a Climate Change Risk Assessment (CCRA) at the BAF-3 Long Range Radar Contaminated Site, located on Brevoort Island, Nunavut, in 2022/2023. A risk identified in this CCRA was how would climate change impact active zone groundwater dynamics at the site. To investigate the risk, Stantec partnered with McGill University to model how active zone groundwater dynamics may be impacted by climate change. With Arctic amplification, the rate of Arctic warming is estimated to be between two to four times greater than at …

Wednesday, Jun 26: Mark Messier Room **11:00 AM - 11:30 AM**

Coral Harbour Remediation and Inuit Capacity Building – A reflection on the Strengths, Successes and Struggles of an Inuit Contractor working in and with their local community.

Mark Messier Room | Indigenous Involvement

Dino Bruce
Director of Operations, Sudliq Developments Ltd.

Jonathan Markiewicz
Senior Geoscientist, Eastern & Northern, Milestone Environmental Contractors Inc

The Federal Government is heavily invested in building capacity throughout the north to increase the capabilities of indigenous companies that can be utilized on future projects. Stemming first and foremost from federal funded projects and programs Indigenous companies are gaining more direct experience in the bidding, management, and completion of contaminated sites projects. A collaborative approach in communication and implementation goes along way in iterative improvements to build capacity year after year. Using the example of a program of three projects being completed by Sudliq Developments Ltd. (SDL) in Salliq (Coral Harbour), Nunavut we will share the strengths, successes and …

Wednesday, Jun 26: Jari Kurri B **11:00 AM - 11:30 AM**

Mitigating substantial impacts on project cost and schedule by developing effective strategies for procurement and construction management at remote / northern sites

Jari Kurri B | Mine Sites

Marie-Pascale Rousseau
Parsons Inc

Michael Nahir
Mr, Parsons Inc.

Coming Soon

Wednesday, Jun 26: Jari Kurri A **11:50 AM - 12:20 PM**

Contaminated Site Management in Remote Northern Alberta in the Midst of Repeated Fire and Flood Cycles

Jari Kurri A | Climate Change

Michelle Cotton
Senior Environmental Scientist, Solstice Environmental Management

Stephanie Comparelli
Senior Environmental Scientist, Solstice Environmental Management

Leaking from a historic heating oil tank at a former school in the remote community of Chateh, Alberta resulted in significant kerosene contamination to soil and groundwater in the heart of the community, and immediately adjacent to Sousa Creek. From the project kick-off in January 2020 until 2023 the project has navigated various complexities, including the COVID pandemic, repeated community flooding, and some of the worst fire seasons on record both of which has resulted in multiple community evacuations posing access challenges both to the remediation site and the bioremediation cells set up for treatment. The project on reserve land …

Wednesday, Jun 26: Jari Kurri B **11:50 AM - 12:20 PM**

Giant Mine Water Treatment Plant –Overcoming the challenges with project delivery in Northern Canada, GHG emissions reduction, and project procurement

Jari Kurri B | Mine Sites

Patrick Schmidt
Senior Engineer, CIRNAC

Rene Hawkes
Project Manager, PSPC

When the federal government formally assumed responsibility for Giant Mine in 2005, it inherited one of the most complex and challenging mine reclamation projects in Canada. A important part of the remediation is the development of the Water Treatment Plant (WTP), which will allow the Government of Canada to treat the arsenic contaminated water generated by the mine and meet the project's commitments to the community. The original effluent treatment plant (ETP) at Giant Mine, a seasonal treatment facility originally constructed in the 1970s, is well beyond it's designed lifespan and needs replacement. The ETP currently treats arsenic mine water …

Wednesday, Jun 26: Mark Messier Room **11:50 AM - 12:20 PM**

Lytton First Nation and Village of Lytton Wildfire Remediation – Contractor's Perspective

Mark Messier Room | Indigenous Involvement

Chris Brown
Director of Operations, Matcon Environmental Ltd

On June 30, 2021, a wildfire tore through the Village of Lytton and the Lytton First Nation destroying over 200 properties. Most of these properties included either residential or commercial buildings that for the most part were burned to the ground with virtually no standing remnants. In the early days following the fires, when it was safe to re-enter Lytton, some broad environmental sampling was completed on the properties. For the sake of time, it was decided that moving forward with remediation of the communities was the most important activity and that an extensive pre-remediation sampling and reporting program was …

Wednesday, Jun 26: Foyer & Wayne Gretzky Ballroom A **12:20 PM - 01:20 PM**

Lunch & Exhibit Hall

Foyer & Wayne Gretzky Ballroom A

Wednesday, Jun 26: Jari Kurri A **01:20 PM - 01:50 PM**

Runoff and Erosion Control in Remote Northern Sites – Opportunities and Constraints at a Remediated Mine Site

Jari Kurri A | Climate Change

Heather Amirault
Surface Water Engineer, Stantec

Reid Smith
Senior Environmental Geoscientist, Stantec

Working in remote areas can result in unique project constraints. Air-access only sites can have restrictions on the size of construction equipment, number of available personnel, available construction materials, and restrictions/ risks to the construction window. This presentation will discuss the challenges and solutions to implementing erosion and sediment control (ESC) measures and performing other maintenance for runoff control at a remote northern abandoned mine site near Yellowknife. The abandoned mine site has been remediated, heavy equipment has been demobilized and long term monitoring and maintenance is being completed by Crown-Indigenous Relations and Northern Affairs Canada (CIRNAC). This project required the …

Wednesday, Jun 26: Jari Kurri B **01:20 PM - 01:50 PM**

Thermal Stabilization of Thawing Foundation Soils at Dam 1, Giant Mine, NT

Jari Kurri B | Mine Sites

Carlos Philipovsky
Project Manager, Public Services and Procurement Canada / Government of Canada

Dam 1 at Giant Mine is classified as a High consequence structure, and contains the Polishing Pond, which retains treated mine water prior to its discharge into the environment. In addition, an underground access portal is situated within B3 Pit, located immediately downstream of the dam. Dam 1 was built sometime in the 1950's and no as-built records for the Dam are known to exist. In 2002, the crest elevation had been decreased by 1m due to ongoing settlement, and the crest was then raised by 1.5m. By 2017, an additional 1m of settlement had been observed. A geotechnical investigation …

Wednesday, Jun 26: Mark Messier Room **01:20 PM - 01:50 PM**

Stakeholder Interests, Northern Logistics and Remedial Objectives: Finding Balance on the Canol Trail

Mark Messier Room | Indigenous Involvement

Caitlin Moore
Project Manager, Public Services and Procurement Canada

Jean-Pierre Pelletier
Project Director, Englobe Corp

The Canol Trail was part of the CANOL (Canadian Oil) Project, a cooperative effort between the United States and Canada, to provide a continuous supply of oil to American forces stationed in the Pacific during World War II. Between 1942 and 1945, approximately 2,650 km of 4- and 6-inch pipe was laid along an access road known as the "Canol Road" which was carved out of the Northwest Territories and Yukon wilderness through permafrost and ice-rich soils. Maintenance infrastructure was constructed to support the pipeline and included 1,600 km of telephone line, pumphouses, bunkhouses, petroleum hydrocarbon storage tanks and out …

Wednesday, Jun 26: Jari Kurri A **02:10 PM - 02:40 PM**

Passive Long Term Ground Freezing Containment of Arsenic Trioxide Mine Waste at Giant Mine

Jari Kurri A | Climate Change

Greg Newman
Principal, Newmans Geotechnique Inc.

Jennifer Singbeil
Senior Project Manager - Implementation, Public Services and Procurement Canada, Government of Canada

Rudy Schmidtke
VP Environment, AECOM

Giant Mine is located near the city of Yellowknife, Northwest Territories, Canada, and it was an operating gold mine for fifty years up to 1999. Part of the waste product associated with the ore extraction was highly toxic and water-soluble arsenic trioxide dust, of which about 237,000 tonnes are currently stored in underground stopes or purpose-built chambers. The Government of Canada took over responsibility for care and maintenance including remediating the mine site in 1999 and, based on many years of assessment, has decided to encapsulate the arsenic storage chambers within permanently frozen ground. Yellowknife is located at 62.5 degrees …

Wednesday, Jun 26: Jari Kurri B **02:10 PM - 02:40 PM**

Assessing the Effects of Historical Mining and Site Remediation Activities on Aquatic Receiving Environments: Case Study of Bullmoose Lake, NWT

Jari Kurri B | Mine Sites

Jenny E Reid
Aquatic Biologist, Stantec Consulting Ltd.

The Bullmoose-Ruth Area Mine Sites (BMR) Remediation Project (BMR Project) encompasses the remediation of seven abandoned mine sites located between 70 and 90 kilometres east of Yellowknife, Northwest Territories. Due to the insolvency of previous operators, Crown-Indigenous Relations and Northern Affairs Canada (CIRNAC) assumed care and control of the mine sites. The remediation of the Bullmoose Mine site, which is the largest of the abandoned mine sites, included the removal of physical hazards, passive treatment systems of a portal seep and Bullmoose Creek, maintenance of submerged and exposed tailings in Skeeter and Beta Lakes, remediation of petroleum hydrocarbon (PHC) impacted …

Wednesday, Jun 26: Mark Messier Room **02:10 PM - 02:40 PM**

Breaking Barriers: Overcoming Project Challenges through Indigenous Partnerships

Breaking Barriers: Overcoming Project Challenges through Indigenous Partnerships

Mark Messier Room | Indigenous Involvement

Gavin Domitter
Director, Indigenous Engagement, Milestone Environmental Contracting

A thought-provoking presentation on how an organization can engage and build long-lasting Indigenous partnerships while celebrating stories of collaboration that make a positive impact. By acknowledging the complexity of Truth and Reconciliation, we are urged to build awareness and understand historical tragedies while understanding that reconciliation is about establishing, building, and strengthening respectful relationships. Key principles are shared on how to integrate the United Nations Declaration on the Rights of Indigenous Peoples for an organization and how Milestone came up with their Indigenous Guiding Principles: • Respect & Recognition, • Community Investment, • Lasting Relationships, • Building Opportunities through Partnership. …

Wednesday, Jun 26: Jari Kurri A **03:00 PM - 03:30 PM**

Evaluating the Applicability of the FSCAP 10-Step Decision Making Framework in Addressing Climate Change

Jari Kurri A | Climate Change

Phyllis Bruleigh
Technical Discipline Manager/Pacific Region, SLR Consulting (Canada) Ltd.

Sean Lynch
Principal Climate Resilience & Sustainability Consultant, SLR Consulting (Canada) Ltd.

In the face of escalating climate change impacts, there is a growing imperative to integrate climate considerations into the decision-making processes across various sectors, including environmental management. The Federal Contaminated Site Action Plan (FSCAP) represents a structured framework designed to address contamination issues and associated liabilities on federal lands. This presentation provides an overview of how and where consultants and government organizations are applying climate change considerations within its 10-step decision-making process. FSCAP's initial steps involve site identification and prioritization, typically focusing on historical contamination sources and associated risks. However, as climate change exacerbates environmental vulnerabilities, traditional risk assessment methodologies …

Wednesday, Jun 26: Jari Kurri B **03:00 PM - 03:30 PM**

Success and Challenges: Gunnar Mine Northern Remediation and Community Impacts

Jari Kurri B | Mine Sites

Chris Yaremko
Regional Director, Western Canada, QM Environmental

Keith Gonda
Senior Project Manager, QM Environmental

The Gunnar Uranium Mine and Mill Site is situated on the north shore of Lake Athabasca in northern Saskatchewan, approximately 68km south of the NWT and Saskatchewan border. Access to the project site is limited, with the site being reachable only by small aircraft or barge for 5 months of the year. Winter road access is restricted to 3 weeks in March, making mobilization to the site extremely complex. In 2019, QM Environmental and Points Athabasca Contracting LP, operating as QM Points LP, undertook the mobilization and remediation efforts for the project. Prior to mobilization, the key to a successful …

Wednesday, Jun 26: Mark Messier Room **03:00 PM - 03:30 PM**

The Remediation of Akpatok Island – Synergy of Collaboration

Mark Messier Room | Indigenous Involvement

Andrea Jenney
Senior Engineer, BluMetric Environmental Inc.

Giselle Cotta
Manager - Northern Contaminated Sites, PSPC

Executing the successful remediation of CIRNAC's Akpatok Island Site is no small feat considering its location on a remote island in Ungava Basin, just north of Nunavik. This former oil and gas exploration site was successfully remediated in 2023. The project faced many challenges including assessment during the COVID-19 pandemic, multi-jurisdictional permitting due to its geographic location in Nunavut and its inclusion in the Nunavik Inuit Land Claim Agreement, post-pandemic charter aircraft and barge availability and its remote location which was susceptible to weather. The remediation project was contingent on the successful access of this site by commercial barges required …

Wednesday, Jun 26: Foyer & Wayne Gretzky Ballroom A **03:30 PM - 04:00 PM**

Break & Exhibit Hall

Foyer & Wayne Gretzky Ballroom A

Wednesday, Jun 26: Wayne Gretzky Ballroom **04:00 PM - 05:00 PM**

Closing Panel: Project Challenges and Solutions Unique to the North

Day One

Wayne Gretzky Ballroom

Amy Allan
Project Manager, Contaminants and Remediation Division, CIRNAC

Caitlin Moore
Project Manager, Public Services and Procurement Canada

Peter Houweling
Advisor, Deton Cho Corporation

This panel will be a lively discussion not just about the headaches but also the tylenol prescribed by these seasoned professionals! Our panelists will share their battle scars from some of the project challenges unique to the north and how they have come up with solutions by working with innovative northerners. The topics will range anywhere from weather to wildlife, engaging with remote stakeholders, access logistics, and how the project management risk response measures are planned and implemented to ensure the job gets done. Any person who has a technical, project management, or engagement role working in the north is …

Thursday, Jun 27: Foyer **08:00 AM - 05:00 PM**

Registration

Foyer

Thursday, Jun 27: Foyer & Wayne Gretzky Ballroom A **08:00 AM - 09:00 AM**

Breakfast

Foyer & Wayne Gretzky Ballroom A

Thursday, Jun 27: Wayne Gretzky Ballroom **09:00 AM - 10:30 AM**

Opening Panel: Indigenous Procurement Lessons Learned

Wayne Gretzky Ballroom

Aaron Braumberger
Socioeconomic Development Manager, Parsons Inc.

Dolan Bogus
Procurement Outreach Team Lead, Public Services and Procurement Canada / Government of Canada

Kelsey Debets
Regional Director, Procurement Assistance Canada, PSPC

Mario Giguère
PSPC

Paul Gruner
Chief Executive Officer, Tłı̨chǫ Investment Corporation & Group of Companies

Join us for a thought-provoking panel discussion where federal procurement officials, experienced contractors, and Indigenous partners share valuable insights on navigating Indigenous procurement in the context of contaminated sites projects. Discover key lessons learned, best practices, and collaborative strategies that drive successful outcomes and foster meaningful partnerships.Rejoignez-nous pour une discussion stimulante au cours de laquelle des fonctionnaires fédéraux chargés d'approvisionnement, des entrepreneurs expérimentés et des partenaires autochtones partageront leurs connaissances approfondies sur la manière de gérer l'approvisionnement autochtone dans le contexte des projets de sites contaminés. Découvrez les principaux enseignements tirés, les meilleures pratiques et les stratégies de collaboration qui …

Thursday, Jun 27: Foyer & Wayne Gretzky Ballroom **10:30 AM - 11:00 AM**

Break & Exhibit Hall

Foyer & Wayne Gretzky Ballroom

Thursday, Jun 27: Jari Kurri A **11:00 AM - 11:30 AM**

Reviving Northern Aquifers: Lessons From Cold Climate In-Situ Chemical Remediation

Jari Kurri A | Technology and Innovation

Dan Boucher
Senior Project Manager, MILESTONE ENVIRONMENTAL

Sameer Al Hajri
Remediation Program Manager, TRIUM ENVIRONMENTAL INC.

This presentation will focus on a specific chemical injection process into a contaminated aquifer requiring the efforts of several highly qualified and specialist companies, combining their expertise to navigate the unique challenges posed by extreme northern conditions. This synergistic alliance was pivotal in addressing the complex logistics, safety considerations, and equipment requirements essential for the project's success emphazizing the importance of collaborative efforts between highly qualified and specialized companies in tackling environmental remediation projects in challenging environments and cold climate.

Thursday, Jun 27: Jari Kurri B **11:00 AM - 11:30 AM**

Slate Islands Coast Guard Lightstation, Lake Superior, Ontario – Remote Site Soil Remediation

Jari Kurri B | Case Studies

Stephanie Demers
Prinicipal, Environmental Services, Stantec Consulting Ltd.

The Slate Islands Coast Guard Lightstation is situated on Patterson Island, Lake Superior, Ontario, located approximately 18 kilometres (km) south of Terrace Bay, Ontario. The site was operated as a manned lightstation between 1903 and the late-1970s and consists of a lighthouse as well as several supporting structures. The supporting structures include former on-Site residences for the lighthouse keeper(s), former power generation facilities, and other ancillary structures. In the late-1970s, the Lightstation became automated and the on-site residences were subsequently leased to private leaseholders (seasonal residents) up until 2017. Through site investigation work, metal, petroleum hydrocarbon (PHC), and polycyclic aromatic …

Thursday, Jun 27: Mark Messier Room **11:00 AM - 11:30 AM**

How to successfully use Cleantech Thermal Desorption for Remediation of Organic Contaminated Soil

Mark Messier Room | Industry

Darryl Nelson
President, Nelson Environmental Remediation Ltd.

Haysem Naboulsi
Corporate Director of Business Deveolpment, Nelson Environmental Remediation Ltd.

Nelson Environmental Remediation (NELSON) has been offering Cleantech Thermal Desorption soil remediation services for over 30yrs. The most commonly used method to treat organic impacted soil is disposal at a landfill site. This method, however does not remediation the soil, it merely re-locates the problem while the property owner maintains the liability and is not sustainable in the long term. Cleantech Thermal Desorption is an innovative process of remediating organic contaminated soils, sediments and sludge in a sustainable manner which preserves the remediated soil for re-use that eliminates liability. Cleantech Thermal Desorption is an Ex-Situ means of physically separating volatile …

Thursday, Jun 27: Jari Kurri A **11:50 AM - 12:20 PM**

Results from An Expert Panel on Treatment of PFAS in Groundwater: Applicability at Remote Sites

Jari Kurri A | Technology and Innovation

Rick McGregor
President, InSitu Remediation Services Ltd

The treatment of PFAS within groundwater is an emerging and challenging issue at sites across the globe. Treatment challenges are further complicated when sites are situated in remote areas such as Canada's northern regions due to logistics, energy limitations and disposal facilities. Results from a series of workshops on the treatment of PFAS in water produced a selection of peer review manuscripts that provided overviews of developmental and implemented technologies for PFAS treatment both ex- and in-situ. This group of international experts reviewed various destructive and sequestering technologies and provided guidance on the development, implementation, and performance of over two …

Thursday, Jun 27: Jari Kurri B **11:50 AM - 12:20 PM**

Cross-Departmental Cost Sharing at Isachsen High Arctic Weather Station

Jari Kurri B | Case Studies

Don Plenderleith
Environmental Division Lead, Nuqsana-Outcome JV

Janice Lee
Project Manager, PSPC

Keelan Veitch
Project Manager, Outcome Consultants Inc.

When northern projects are scheduled in similar timeframes at similar locations, interesting opportunities for cost-sharing and cost savings can accrue. Crown-Indigenous Relations and Northern Affairs Canada (CIRNAC) and Environment and Climate Change Canada (ECCC), both have environmental programs managed by Public Services and Procurement Canada (PSPC) for sites on Ellef Ringnes Island in the High Arctic. Dillon-Outcome had been engaged in CIRNAC's environmental assessment and remedial planning project for seven contaminated sites known as the Pioneer High Arctic Bundle for one year, when PSPC (on behalf of ECCC) approached DOJV about carrying out a site investigation program at the Isachsen …

Thursday, Jun 27: Mark Messier Room **11:50 AM - 12:20 PM**

Anaerobic Bioremediation Applications for Petroleum Hydrocarbons

Mark Messier Room | Industry

Sandra Dworatzek
Senior Principal Scientist, SiREM

Hydrocarbons are toxic and widespread pollutants owing to releases or spills of petroleum chemicals into the environment. Decades of research has shown that various hydrocarbons including benzene (C6H6), a confirmed carcinogen, can be broken down by both aerobic and anaerobic microorganisms with specialized metabolic capabilities. Benzene-degrading microorganisms are widespread in nature and have the potential to proliferate after a spill event. But as many environmental practitioners will attest, active anaerobic benzene degradation rarely occurs at sites devoid of oxygen. Are anaerobic benzene degraders simply proliferating too slowly to support bioremediation efforts? Are they unable to grow at all? Or are …

Thursday, Jun 27: Foyer & Wayne Gretzky Ballroom A **12:20 PM - 01:20 PM**

Lunch & Exhibit Hall

Foyer & Wayne Gretzky Ballroom A

Thursday, Jun 27: Jari Kurri A **01:20 PM - 01:50 PM**

Waste to Value in Thompson, Manitoba

Jari Kurri A | Technology and Innovation

Darryll Champagne
Regional Manager, KBL Projects Ltd

This proposed presentation is an overview of the planning process and execution of a large scale mine site copper pond decommissioning project over a multi-year period spanning 2021 to 2026.The key objective of the decommissioning plan is to reclaim approximately ~72,000 wet short tons (WST) of copper (Cu) precipitate from No. 5 & 6 Copper Ponds at the site. KBL Projects Ltd. is the Prime Contractor onsite for all Environmental, Procurement and Contract Management (EPCM) requirements and this presentation will describe how this innovative project was developed, and then executed in the field.

Thursday, Jun 27: Jari Kurri B **01:20 PM - 01:50 PM**

Use of PFAS in the Mining Industry and Potential Impacts, Risks and Challenges for the Environment North of 60

Jari Kurri B | Case Studies

Tanya Shanoff
Sector Leader - Federal, Environmental Services, Canada, Stantec Consulting Ltd.

Per- and poly-fluorinated alkyl substances (PFAS) are a group of more than 3,000 man-made chemicals including perfluorooctanoic acid (PFOA) and perfluorooctane sulfonate (PFOS). This emerging class of contaminants with its constantly evolving regulations and guidelines has been the centre of litigation settlements already worth over $5.5 billion across various US states and has been a costly contaminant for federal custodians to characterize and remediate on their sites across Canada. This group presents complex challenges given the mobility, persistence, toxicological uncertainties, and technical obstacles to remediating these parameters. Ubiquitous at very low levels in the environment, PFAS have been measured in …

Thursday, Jun 27: Mark Messier Room **01:20 PM - 01:50 PM**

GRAFTA™ an innovative graphene-based adsorbent for contaminated site risk management

Mark Messier Room | Industry

Mark Bentsen
CEO, Grafta Nanotech Inc.

There are over 4000 sites in Canada with a wide range of contaminants in soil and groundwater, including heavy metals, petroleum hydrocarbons, PAHs and others. Remediation or risk management of the typically large-scale sites, as a key component of the Federal Contaminated Sites Action Plan (FCSAP) is often hindered by technological challenges regarding hard to remove contaminants such as heavy metals and complex organic compounds. GRAFTA™, is a micro-scale graphene-based adsorbent with thousands of nano-scale graphene and graphene oxide layers that provide considerable adsorption sites both for heavy metals and inorganic cations on graphene oxide and organic compounds on graphene …

Thursday, Jun 27: Jari Kurri A **02:10 PM - 02:40 PM**

Forensics Analysis of Petroleum Hydrocarbon Impacts in Organic Soils at Sand Hill River Counting Fence Camp, Labrador

Jari Kurri A | Technology and Innovation

Kelly Johnson
Technical Lead (Canada) - Risk Assessment and Toxicology, Stantec

The Sand Hill River Counting Fence Camp is a remote site operated by DFO on the southeast coast of Labrador near the mouth of the Sand Hill River. Fuel handling and storage have resulted in petroleum hydrocarbon (PHC) impacts in surface soil at the site. PHC impacts in soil exceeding Canada Wide Standards (CWS) covered an area of approximately 130 m2. Soil samples consisted primarily of organic/peat material including peat, root mat, and grass. Visual and olfactory evidence of PHCs was not observed in the soil nor was free phase product observed in the soil. A forensic analysis indicated that …

Thursday, Jun 27: Jari Kurri B **02:10 PM - 02:40 PM**

Protection of potable aquifer affected by PFAS via in situ Point of Entry Treatment technologies

Jari Kurri B | Case Studies

Jean Paré
Vice-President - Sales & Marketing, Chemco Inc.

The intensive use of per- and poly-fluoroalkyl substances (PFAS), described as eternal contaminant and considered carcinogenic, are a source of public health concerns in various environments. These compounds can be transported over very long distances, particularly in air and water. PFAS are highly mobile in soil and groundwater, leading to contamination of drinking water sources that must be adressed. PFAS are not found in nature and are not easily microbiologically degraded thus their "eternal' qualification. New materials for in situ control of PFAS movement utilizing sorption processes have been developed and tested in the laboratory and implemented in the field. …

Thursday, Jun 27: Mark Messier Room **02:10 PM - 02:40 PM**

Identifying and Addressing False Petroleum Hydrocarbon Detections from Natural Organics

Mark Messier Room | Industry

Dwayne Bennett
National Technical Specialist, ALS Global

Testing for Petroleum hydrocarbons (PHCs) is a critical component of environmental site assessments. Most test methods for PHCs are non-selective, because they must capture thousands of different components that can be found in complex hydrocarbon mixtures such as fuels or lubricating oils. Since 2001, the Canada-wide standard test method for PHCs has been used across much of Canada for the analysis of PHCs in soils. Biogenic interferences on petroleum hydrocarbons are well-known, due to various forms of naturally occurring organic matter (e.g. peat/ muskeg). Biogenic interferences can be significant and, if not addressed, can falsely classify samples or sites as being …

Thursday, Jun 27: Jari Kurri A **03:00 PM - 03:30 PM**

The Digital Transition in Remediation: Enhancing Long-term Project Success through Integrated Digital Technologies

Jari Kurri A | Technology and Innovation

Nathan Howes
Digital Development and Engagement Specialist, AECOM

Niandry Moreno
Senior Digital Solutions Analyst, AECOM

The advent of digital technologies has revolutionized many aspects of environmental remediation, from planning and monitoring to stakeholder engagement and data analysis. At the heart of this transformation is the recognition that data is our most valuable asset. However, harnessing this resource effectively remains a formidable challenge, especially in extensive projects involving diverse teams and stakeholders. The primary obstacle is ensuring that every member of the project team has equitable access to critical data in real-time, facilitating informed decision-making and cohesive action across all project phases. AECOM, a leader in delivering environmental remediation solutions, has been at the forefront of …

Thursday, Jun 27: Jari Kurri B **03:00 PM - 03:30 PM**

World's First Injected In-Situ Treatment Barrier for a PFAS Plume Using a Modified Clay Amendment

Jari Kurri B | Case Studies

Patrick O'Neill
Project Manager, Vertex Environmental Inc.

Shari Reed
Project Manager Contaminated Sites, Environmental Sciences Group RMC

Per- and polyfluoroalkyl substances (PFAS) were detected in the subsurface in the vicinity of a firefighting training area (FFTA) at a military base in Canada. A series of storm sewers are present for drainage and control of surface and groundwater on the base. Unfortunately, part of the storm sewer network bisects the area near the FFTA. As a result, PFAS-impacted groundwater has been migrating along the sewer bedding and ultimately discharging into a nearby wetland. Due to potential PFAS competitive adsorption limitations associated with activated carbon, a modified clay amendment that preferentially adsorbs PFAS over other organic compounds (i.e., Fluoro-Sorb® …

Thursday, Jun 27: Mark Messier Room **03:00 PM - 03:30 PM**

LNAPL Immobilization and Destruction Technologies in Support of Risk Assessment-Based Site Closures

Mark Messier Room | Industry

Kevin French
Vice President, Vertex Environmental Inc.

Property owners need predictable costs and timelines to manage and/or transact their properties. Obtaining regulatory closure on impacted sites typically means obtaining a Remediation Certificate from the provincial regulator. However, remediation costs sometimes can outweigh otherwise inherent property values and limit options for significantly impacted sites. In these instances, risk assessment can be helpful in reducing costs by eliminating pathways of concern or re calculating guidelines to be site-specific using approved risk assessment approaches. But what happens when a site contains light, non-aqueous phase liquid (LNAPL)? Most Canadian jurisdictions allow risk assessments on petroleum hydrocarbon-impacted sites, but there usually are …

Thursday, Jun 27: Foyer & Wayne Gretzky Ballroom A **03:30 PM - 04:00 PM**

Break & Exhibit Hall

Foyer & Wayne Gretzky Ballroom A

Thursday, Jun 27: Wayne Gretzky Ballroom **04:00 PM - 05:00 PM**

Closing Panel: Making a Career in Contaminated Sites

Wayne Gretzky Ballroom

Dr. Yogendra Chaudhry
VP Professional Services, ECO Canada

Jeff Rosnawski
Giant Mine Remediation Project, Technical Specialist, Government of Northwest Territories

Julie Wildgoose
Vice President, Programs & Student Success, Indspire

This informal panel will discuss the diverse career paths that people can follow within the world of contaminated sites and the different considerations that come into play when navigating these career choices. Special emphasis will be placed on the recruitment, retention, and development of Indigenous practitioners.Ce panel informel discutera des divers parcours professionnels que l'on peut suivre dans le monde des sites contaminés et des différentes considérations qui entrent en jeu lorsqu'on chemine dans ces choix de carrière.L'accent sera mis sur le recrutement, la rétention et le développement des praticiens autochtones.