

Weekly NEWS



An Information Service for Alberta's Environment Industry

The Week Ending October 11th, 2019



RemTech 2019
October 16-18, 2019
Fairmont Banff Springs

Starts Next Week – Register Now

4 Delegate Passes Remaining

Inside this Issue:

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RemTech 2019 starts next week. There are only 4 delegate passes remaining. The program features **80** technical presentations, and four amazing keynotes and two networking receptions.

Topic Areas include: Sulfolane Remediation, Digital Technology Innovations, Legal/Regulatory Updates, Phytoremediation, Brownfields, Northern and Unique Locations, Risk Based Closure - Fact or Fairy Tale, In-Situ, Land Stewardship and much more.

RemTech 2019 Keynotes:

- Opening Keynote: **Saskatchewan's Uranium Mining Legacy** - Ian Wilson, Remediation Manager, Saskatchewan Research Council
- Thursday Keynote: **The Ripple Effect** - Annie Griffiths, Photographer, Founder and Executive Director of Ripple Effect Image
- Friday Breakfast Keynote (new addition): **One Giant Leap: The Impossible Mission that Flew Us to the Moon**, Charles Fishman, Author, Journalist
- Closing Keynote: **Veryovkina – Exploration of the World's Deepest-known Cave and the Race to Escape it**, Robbie Shone, Photographer, Cave Explorer, Visual Story Teller

You can check out full program at: www.esaa.org/remtech/agenda/



ESAA is pleased to announce that *RemTech 2019* is bullfrog powered with 100% green energy. This means that Bullfrog Power's generators put 100% green energy onto the grid to match the amount of conventional energy the event uses, displacing energy from polluting sources.

RemTech Sponsors.

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Comments & submissions are welcome!

Please submit your announcement via e-mail to: weeklynews@esaa.org

Silver: Alberta Society of Professional Biologists * Bionera * Earthmaster Environmental Strategies * ECO Canada * EnviroSearch * Geosyntec Consultants * In-Situ, Inc. * Iron Creek Group * McLennan Ross LLP * Milestone Environmental Contracting * Mud Bay Drilling * Precision Liability * Rice Resource Technology * Solstice Canada * Summit, an Earth Services Company * Terralogix Solutions * Tervita Corporation * Thurber Engineering

Bronze: Bureau Veritas * ERIS * Ivey International * Pro-Source Insurance & Risk Management * Willms & Shier Environmental Lawyers LLP

Opening Reception: Beaver Municipal Solutions

Lanyards: Ivey International

Room Keys: Sublatus Earthworks and Environmental

Opening Keynote Breakfast: TRIUM Environmental

Charging Station: JSK Consulting

Conference App: Willms & Shier Environmental Lawyers LLP

Thursday Keynote Luncheon: Matrix Solutions

Friday Breakfast Sponsor: AGAT Laboratories

Friday Keynote Luncheon: Waste Connections of Canada

Silent Auction: ClearStream Energy Services

Reception Drink Tickets: Proactive Environmental Rentals

Artworks Reception: Intrinsic * JSK Consulting * THINK Envirotechnical * Trace Associates

Photo Booth Wednesday: Trace Associates

Photo Booth Thursday: SECURE Energy Services

Full details available online at: www.esaa.org/remtech/

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REMTECH 2019 - REQUEST FOR SILENT AUCTION ITEMS

RemTech is not only a great learning and networking event but it has also turned into one of the largest charity fundraisers for the environment industry. In the past 13 years, over \$698,000 has been raised for charity at *RemTech*.

In the past, **your support has been incredible and we are so appreciative of that.** This year **we are really, really, really short of auction items** and are requesting donations. ***Be creative!***

All proceeds from the auction will be donated to the Environmental Artworks Foundation of Alberta and the Ilsa Mae Research Fund at Muscular Dystrophy Canada.

All donors will be highlighted in the conference app, conference website (www.esaa.org/remtech/charities/www.esaa.org/remtech/charities/) and on the bid sheets.

To donate an item or for more information, contact Joe Chowaniec at the ESAA Office, chowaniec@esaa.org

Thank you in advance for your support!

SASKATCHEWAN'S URANIUM MINING LEGACY: A COMPLEX ROAD TO REMEDIATION

Catch Ian Wilson's keynote address "Saskatchewan's Uranium Mining Legacy" on October 17, 2019 at 8:30 a.m. at [RemTech](#). You can also learn more about Project CLEANs on October 17, 2019 at 10:15 a.m. at SRC David Sanscartier's presentation "Planning Radiological Risk Mitigation for Remediation on Abandoned Uranium Mine Sites."

Ian Wilson enjoys a good puzzle, but when he started at SRC in 2012 as a project manager on one of Saskatchewan's biggest remediation projects, he was confronted with 37 different puzzles in the form of abandoned uranium mine sites scattered across remote areas of northern Saskatchewan. Never one to back down from a challenge—after all, he spent years as a soldier with the Canadian military—Wilson dug his heels in.

"Each of the 37 sites is unique. Yes, we can find commonalities and apply some templated approaches to make the remediation efficient and effective. But at the end of the day, each site is different, both from an assessment and a remediation standpoint," says Wilson.

There is no one-size-fits-all solution to [Project CLEANs](#) (Cleanup of Abandoned Northern Sites), which is a multi-year remediation project SRC is managing to assess and reclaim abandoned uranium mine and mill sites in Saskatchewan. In order to tackle a project of this size, Wilson relies on the skills and knowledge of SRC's [Environmental Remediation](#) team: a multi-disciplinary group of experts he now leads who work hard in the office and field to find solutions to the complex problems at each site.

Building a team

A core team of about 20 scientists, engineers, project managers and support staff work on the project throughout the year. "When I started with SRC, we had several dedicated people working on the project and we've been able to scale up and recruit some world-class talent," Wilson says.

REMTECH KEYNOTE ADDRESS:

Saskatchewan's Uranium Mining Legacy

**October 17, 2019
at 8:30 a.m.**



Ian Wilson from the Saskatchewan Research Council (SRC) will discuss how SRC is addressing the complexities of a large-scale remediation project for abandoned mine sites in northern Saskatchewan.



www.src.sk.ca/remediation | info@src.sk.ca

Never one to back down from a challenge—after all, he spent years as a soldier with the Canadian military—Wilson dug his heels in.

“We’ve built a dynamic team around the needs of the project rather than trying to manage the project around the team’s skills.”

This is what makes SRC’s approach to remediation unique. “They’re the lifeblood of this project.”

On the team is a nuclear ecologist who is world-renowned for his research on Chernobyl. “He understands how radionuclear material interacts with the environment, which is an exceedingly important aspect of this project, particularly in the assessment stage.” There are also experts in natural revegetation, [data management](#), project management and coordination, logistics, community engagement and [geospatial imaging](#).

“We’re also fortunate to employ summer students through our Aboriginal Mentorship Program,” says Wilson. “They bring a fresh perspective to the work. Many of these students form connections to these communities, so they want to be part of the clean up.”

Community engagement

Remediation work has created opportunities for employment and skill development in the communities through SRC’s contractors. “It’s really important to us that the communities not only benefit environmentally from this work, but socially and economically too, long after we’re gone.” Sustainability is a core component of SRC’s remediation strategy and is most evident in its approach to procuring contractors and consultants, which includes a heavy weight on targeted metrics related to using local employment, equipment, businesses and supplies.

The role of community engagement for SRC goes well beyond procurement. Engaging and communicating with Indigenous groups and other community stakeholders early in the project is an important methodology for success, Wilson says, especially in isolated northern areas. “By starting early in the process and continuing to build and maintain relationships throughout the life of the project, we gain the trust of the local community and the project will see real, beneficial participation.”

Wilson has heard directly from many community members about the historic lack of engagement from industry in the past where engagement was just another box to check or was avoided altogether. “Through past conversations with many companies, I’ve heard about worries related to community engagement because of the effort involved. It does take a lot of work and it is hard, but you must do it in order to work effectively in and with these communities. They are a partner in the project because in many cases, it’s their backyard you’re working in.”

It’s also important to understand that community and stakeholder needs in a project or area may not remain static. Engagement and communication strategies for projects are most successful when rights and stakeholders are made to feel a part of, and take ownership of, processes within the project.

Lessons learned

The 37 abandoned uranium mine sites in northern Saskatchewan are just a small sampling of industrial sites that need remediating around the world. What makes this remediation project unique is that Saskatchewan is a pioneer in uranium mining and was one of the [first uranium producers](#) in the world, but it’s also one of the first jurisdictions that recognized abandoned sites needed to be assessed and remediated to reduce risks to the public and environment.

“I feel globally, that Saskatchewan and SRC are ahead of many other jurisdictions regarding remediation approaches,” says Wilson. “Other jurisdictions are in the early stages of assessment and remediation and they’re looking at Saskatchewan and wanting to learn from our experience.” The project team has learned a lot of valuable lessons along the way and developed some novel approaches using SRC’s internal expertise and facilities.

Project CLEANS has multiple levels of regulators, communities and stakeholders, all with different perspectives and expectations for how the work should proceed. Another challenge is that the sites are in remote and isolated areas, sometimes only accessible by boat or plane. This poses logistical and safety challenges for getting crews and equipment to the sites, especially when the weather can be unpredictable.

“Everything we do has to be safe, proactively safe,” Wilson emphasizes. “Safe by design, not by luck.”

"We have to look at safety and our work this way because we're often far from emergency facilities." The entire team receives comprehensive safety training throughout the year, including motorized vehicle, first aid, wildlife and survival training.

Strategy is another key aspect of the project, during both the assessment and the remediation phase. The team works with communities and stakeholders to find ways to merge local traditional knowledge and science into project plans. "The communities get a lot of information from us, but we get just as much information from them, which helps inform the project from all angles. It's good business for both sides," Wilson says.

This integrated approach is necessary as Project CLEANS is publicly funded, which means that all the stakeholders involved, from government to communities, need to know they're getting the best value for the work being done. "We contract out a lot of the construction work, but the research, the science aspect is being done in-house. SRC is a multi-disciplinary company, which I think is an advantage because we can develop the science and then apply it in the field. I can put a problem out there and I know someone at SRC will find a solution. Not a lot of companies can say they can do that using their own resources."

SRC has already completed remediation work at the [Lorado Mill Site](#), one of two complex sites out of the 37 that are part of Project CLEANS. Tailings remediation at the [Gunnar Mine and Mill Site](#) is nearing completion and the second phase of work related to legacy debris and waste has begun. Several of the smaller [mine and exploration sites](#) have been cleaned up, which involves remediation activities such as [constructing proper closures for mine openings](#) and demolishing buildings.

While there is still a lot of work left to be done before all the sites are transferred to Saskatchewan's Institutional Control Program, Wilson says they've come a long way since the project started in 2006. "These sites were abandoned in the 50s and 60s and we've had to basically recreate their footprint using historical maps because they were completely derelict. It's rewarding to see so many people come together to work on this project. We're all driven by the same end goal—to see the land returned to nature."

ALBERTA ENERGY REGULATOR'S FORMER CEO GROSSLY MISMANAGED PUBLIC FUNDS TO CREATE INTERNATIONAL CENTRE: AUDITOR

Alberta's energy regulator wrongfully used its resources to establish an international centre outside its mandate, while its former CEO displayed "reckless and wilful disregard" for the proper management of public funds, according to investigations by three different provincial government watchdogs.

The damning reports by Alberta's auditor general, public interest commissioner and ethics commissioner centred on the creation and operation of the now-defunct International Centre for Regulatory Excellence, or ICORE.

The Alberta Energy Regulator (AER), which is funded by a levy charged to the energy sector, oversees the province's massive energy sector and is expected to ensure the safe and environmentally responsible development of the industry.

It established ICORE in 2017 as a separate, external entity that would offer training to regulators around the world.

In findings released Friday, both the auditor general and public interest commissioner found this was outside the AER's mandate and that public money was spent inappropriately on ICORE activities.

"AER engaged in activities outside of its mandate and public money was spent inappropriately on ICORE activities," read the [report from Alberta Auditor General](#) Doug Wylie.

He estimated the total financial impact of ICORE activities on the AER totalled \$5.4 million, though \$3.1 million was recouped. The AER is still out of pocket \$2.3 million, according to the audit.

Wylie also concluded that ICORE activities lacked a credible benefit to the AER.

'Gross mismanagement' by former CEO

The [Office of the Public Interest Commissioner report](#) levelled some of its strongest criticism at Jim Ellis, who was president and CEO of the AER and president of ICORE.

"His actions demonstrated a reckless and wilful disregard for the proper management of public funds, public assets and the delivery of a public service, which ... constitutes gross mismanagement," the report said.

Ethics Commissioner Marguerite Trussler's report also found that Ellis had a conflict of interest "in that he furthered his own interest and improperly furthered the private interest of three other employees."

"The primary motivation behind ICORE not-for-profit was to provide future employment for Mr. Ellis and others."

However, Public Interest Commissioner Marianne Ryan told reporters during a news conference that there was no evidence to suggest Ellis benefited personally from a financial perspective.

The matters did not reach the threshold to refer them to the solicitor general for potential criminal charges, she said.

Ryan added that her report is not a condemnation of the AER as a whole. "It was employees of the AER that brought this matter to my attention and assisted with the investigation," she said.

Controls to monitor expenses at first 'non-existent'

The auditor general's report also found that controls and processes to protect against potential conflicts of interest failed and that oversight from the AER's board was ineffective.

"Controls to track and monitor expenses related to ICORE activities were at first non-existent and then poorly implemented," the report states. "The tone at the top at AER did not support a strong control environment or compliance with policies."

Wylie's report said a "culture of fear" at the AER stifled concerns regarding ICORE activities, with a number of staff interviewed by his office saying that employees who expressed complaints felt at risk of losing their jobs.

The culture at the AER stifled concerns regarding ICORE activities, Wylie said. A number of staff interviewed by his office used the phrase a "culture of fear" and said employees who were vocal about expressing complaints were at risk of losing their jobs.

AER sued ICORE in 2019

A recent CBC News [investigation](#) found a close and complicated relationship between the AER and ICORE, including the involvement of Ellis.

Several key figures who were involved with ICORE, including Ellis, are no longer associated with either organization. Ellis [resigned from his post](#) at the beginning of 2019. Ellis could not immediately be reached for comment Friday.

Also earlier this year, the AER sued ICORE and received a default judgment in its favour for \$2.6 million for money it said it was owed for the development and delivery of training materials.

The results of the provincial investigations come at a time when the energy regulator is under scrutiny from the provincial government.

In September, Energy Minister Sonya Savage announced her department was launching a review of the AER and appointed an interim board of directors to set its future direction.

Savage and Environment Minister Jason Nixon issued a joint statement Friday on the results of the investigations, saying they "cannot condemn the practices noted in these reports strongly enough."

"Our government was elected on a promise to reform the AER, which is precisely why we have already taken action, launching a review of the AER in August and replaced the board in the same month," the statement said.

The recommendations contained within these reports will inform the Alberta government's review of the AER, they said, noting that they expect the agency's interim board to implement the reports' recommendations.

Among the recommendations outlined in the three reports:

- Corporate governance throughout Alberta agencies, boards and commissions needs to be strengthened.
- AER staff need to be made aware of and sufficiently trained on the whistleblowing process.
- The AER should evaluate whether any additional funds expended on ICORE activities are recoverable.

In statement, the interim board of the AER said it will take the recommendations seriously and implement any required actions "in order to enhance public confidence" in the regulator.

"While ICORE was originally established to provide training to AER employees and support information-sharing across jurisdictions, it is clear now that a small group of senior leaders used AER resources in a way that is unacceptable," the regulator said in a statement. "These individuals are no longer employed at the AER."

AER: NEW EDITION OF MANUAL 011

AER released a new edition of *Manual 011: How to Submit Volumetric Data to the AER*. Changes were made to the activity codes in appendix 1 and to the wording around acid gas in appendix 9.

These changes make the manual consistent with the latest editions of *Directive 060: Upstream Petroleum Industry Flaring, Incinerating, and Venting* and *Directive 017: Measurement Requirements for Oil and Gas Operation*, which were released in December 2018 (see *Bulletin 2018-37* and the Providing Information > By Topic > [Methane Reduction](#) page on our website).

Manual 011 is available on the AER website, www.aer.ca. Printed copies of the directive can be purchased from AER Order Fulfillment, Suite 1000, 250 – 5 Street SW, Calgary, Alberta T2P 0R4; telephone: 403-297-8311 or 1-855-297-8311 (toll free; option 0); fax: 403-297-7040; email: [InformationRequest@aer.ca](mailto:InformationRequest@ aer.ca).

NUNAVUT-BASED MINING COMPANY FINED FOR FAILURE TO COMPLY WITH METAL MINING EFFLUENT REGULATIONS

The Government of Canada enforces the laws that protect Canada's air, water, and natural environment, and we take pollution incidents and threats to the environment very seriously.

On October 2, 2019, TMAC Resources Inc. was ordered to pay \$50,000, in the Nunavut Court of Justice, after pleading guilty to one offence under the *Fisheries Act*, in violation of the *Metal Mining Effluent Regulations*. The total fine will be directed to the Government of Canada's Environmental Damages Fund.

In December 2015, Environment and Climate Change Canada enforcement officers launched an investigation, which revealed that TMAC Resources Inc. (at their Hope Bay mine site) had deposited effluent containing a deleterious substance into Doris Creek without meeting regulatory requirements. These requirements include collecting and testing samples and reporting results. The *Metal Mining Effluent Regulations* authorize deposits of effluent, provided the conditions stipulated in the regulations are observed. TMAC Resources Inc. failed to meet all of these conditions and was not authorized to discharge effluent from the site.

As a result of this conviction, the company's name will be added to the Environmental Offenders Registry.

REMEDATION TECHNOLOGY NEWS AND RESOURCES

(The following are selected items from the US EPA's Tech Direct - <http://clu-in.org/techdirect/>)

Upcoming Live Internet Seminars

Bioremediation - Expanding the Toolbox - 11, 2019. This series emphasizes new approaches to elucidate mechanisms responsible for bioremediation. The series features innovative molecular, biochemical, cellular, and/or engineering tools to advance our understanding of the structural and functional properties of microorganisms or

plants involved in the bioremediation of hazardous substances. The second session on October 3 will highlight innovative genomic approaches to enhance bioremediation by microbes and plants, and the third session on October 10 will highlight new and emerging tools to improve existing bioremediation approaches and improve human health. For more information and to register, see <https://clu-in.org/live>.

ITRC Bioavailability of Contaminants in Soil: Considerations for Human Health Risk Assessment - October 10, 2019, 1:00PM-3:15PM EDT (17:00-19:15 GMT). The basis for this training course is the ITRC guidance: Bioavailability of Contaminants in Soil: Considerations for Human Health Risk Assessment (BCS-1). This guidance describes the general concepts of the bioavailability of contaminants in soil, reviews the state of the science, and discusses how to incorporate bioavailability into the human health risk assessment process. The target audience for this guidance and training course are: project managers interested in decreasing uncertainty in the risk assessment which may lead to reduced remedial action costs, and risk assessors new to bioavailability or those who want additional confidence and training in the current methods and common practices for using bioavailability assessment to more accurately determine human health risk at a contaminated site. As a participant in this training you should learn to: apply the decision process to determine when a site-specific bioavailability assessment may be appropriate, use the ITRC Review Checklist to develop or review a risk assessment that includes soil bioavailability, consider factors that affect arsenic, lead and PAH bioavailability, select appropriate methods to evaluate soil bioavailability, and use tools to develop site-specific soil bioavailability estimates and incorporate them into human health risk assessment. For more information and to register, see <https://www.itrcweb.org> or <https://clu-in.org/live>.

ITRC Petroleum Vapor Intrusion: Fundamentals of Screening, Investigation, and Management - October 24, 2019, 1:00PM-3:15PM EDT (17:00-19:15 GMT). Chemical contaminants in soil and groundwater can volatilize into soil gas and migrate through unsaturated soils of the vadose zone. Vapor intrusion (VI) occurs when these vapors migrate upward into overlying buildings through cracks and gaps in the building floors, foundations, and utility conduits, and contaminate indoor air. If present at sufficiently high concentrations, these vapors may present a threat to the health and safety of building occupants. Petroleum vapor intrusion (PVI) is a subset of VI and is the process by which volatile petroleum hydrocarbons (PHCs) released as vapors from light nonaqueous phase liquids (LNAPL), petroleum-contaminated soils, or petroleum-contaminated groundwater migrate through the vadose zone and into overlying buildings. The ITRC Technical and Regulatory Guidance Web-Based Document, Petroleum Vapor Intrusion: Fundamentals of Screening, Investigation, and Management (PVI-1, 2014) and this associated Internet-based training provide regulators and practitioners with consensus information based on empirical data and recent research to support PVI decision making under different regulatory frameworks. The PVI assessment strategy described in this guidance document enables confident decision making that protects human health for various types of petroleum sites and multiple PHC compounds. This guidance provides a comprehensive methodology for screening, investigating, and managing potential PVI sites and is intended to promote the efficient use of resources and increase confidence in decision making when evaluating the potential for vapor intrusion at petroleum-contaminated sites. By using the ITRC guidance document, the vapor intrusion pathway can be eliminated from further investigation at many sites where soil or groundwater is contaminated with petroleum hydrocarbons or where LNAPL is present. For more information and to register, see <https://www.itrcweb.org> or <https://clu-in.org/live>.

New Documents and Web Resources

Technology Innovation News Survey Corner. The Technology Innovation News Survey contains market/commercialization information; reports on demonstrations, feasibility studies and research; and other news relevant to the hazardous waste community interested in technology development. Recent issues, complete archives, and subscription information is available at <https://clu-in.org/products/tins/>. The following resources were included in recent issues:

- Voluntary Remediation Program Compliance Status Report: Thomasville National Bank, 301 N. Broad Street, Thomasville, Thomas County, Georgia
- Development and Optimization of Analytical Methods for Simultaneous Determination of IM and Legacy Explosive Compounds
- The Use of Advanced Molecular Biological Tools in Groundwater Contaminated with Chlorinated Solvents [Webinar]
- A Rigorous Demonstration of Permeability Enhancement Technology for In Situ Remediation of Low Permeability Media
- Hexavalent Chromium Treatment Technologies
- Assessment of Pump-and-Treat System Impacts on 200 West Aquifer Conditions: Interim Status Report

- PFAS and Other Emerging Contaminants Conference
- Green Remediation Best Management Practices: Sites with Leaking Underground Storage Tanks
- Geophysical Methods for Characterization and Monitoring at Groundwater Remediation Sites

EUGRIS Corner. New Documents on EUGRIS, the platform for European contaminated soil and water information. More than 10 resources, events, projects and news items were added to EUGRIS in September 2019. These can be viewed at <http://www.eugris.info/whatsnew.asp> . Then select the appropriate month and year for the updates in which you are interested. The following resource was posted on EUGRIS:

Overview of a large scale Phytoremediation in the USA. With the Great Lakes Restoration Initiative, the Forest Service works in partnership with cities, counties, and corporations to install phytoremediation sites. The initiative is in its fourth year of annual funding, and altogether, about 20,000 trees have been planted at 16 phytoremediation sites in the Lake Michigan and Lake Superior watersheds. The trees are mostly fast-growing willows and poplars, which are ideal for phytoremediation because they grow quickly and have deep and extensive root systems. View more information at <https://www.usda.gov/media/blog/2019/08/30/trees-can-do-dirty-work-waste-cleanup> .

CL:AIRE Bulletin: Bio-restoration of metal-contaminated soil using biochar to enhance the productivity of marginal land (2019). CL:AIRE?s INSPIRATION bulletins describe practical aspects of research which have direct application to the management of contaminated soil or groundwater in an agricultural context. This bulletin describes how the properties of biochar can influence its performance for the restoration of metal-polluted soil. View more information at <https://www.clare.co.uk/component/phocadownload/category/66-inspiration-bulletins?download=692:ib8-bio-restoration-of-metal-contaminated-soil-using-biochar-to-enhance-the-productivity-of-marginal-land-2019> .

New ESAA Member

ESAA's Board of Directors and staff would like to welcome the following new member:

Full Member:

LANGAN ***INTERNATIONAL***

Langan International

#228 - 100 Fourth Ave SW

Calgary, AB T2P 3N2

Phone: (403) 300-1700

Web: www.langan.com/

Cory Lavoie, Project Manager - Environment

e-mail: clavoie@langan.com

Langan International provides an integrated mix of engineering and environmental consulting services in support of land development projects, corporate real estate portfolios, and the energy industry. Our clients include developers, property owners, public agencies, corporations, institutions, and energy companies worldwide. We excel in promoting and gaining regulatory acceptance of risk based strategies and developing practical solutions for land reclamation and remediation projects.

Upcoming Events

TRAINING SESSIONS: AER'S RECORD OF SITE CONDITION FORM

We will hold training webinars regarding the proper completion of the AER's Record of Site Condition form at 2:00 p.m. on Wednesday, October 23, 2019, and at 10:00 a.m. on Thursday, November 7, 2019. This training will introduce the form, highlight common errors, and provide a number of case studies of varying complexity.

The training is intended for environmental and regulatory coordinators and environmental consultants; we will assume participants are familiar with environmental assessment and contamination management.

Register

To register, visit the Industry Information Sessions tab on AER's [events page](#).

BEST 2020: Call for Abstracts Now Open!

Bettering Environmental Stewardship & Technology
May 6 - 8, 2020 • Fairmont Chateau Whistler

The British Columbia Environment Industry Association invites submissions of papers and technical presentations for its seventh annual Bettering Environmental Stewardship and Technology Conference (BEST 2020) to be held in beautiful Whistler, BC, May 6 to 8, 2020.

For more information visit: <https://bceia.com/best/>

Industry Positions Openings

For more information visit ESAA's Job Board under the news section of www.esaa.org

Junior Environmental Consultant



NORTH SHORE
Environmental Consultants

Term: Full-Time

Number of Positions: 1

Application Deadline: October 18, 2019

Job Start Date: ASAP

Job Location: Sherwood Park

North Shore Environmental Consultants Inc. is a progressive environmental company that specializes in providing environmental management and consulting services. Since our inception in 2002, North Shore has offered cost-efficient and effective solutions to the complex environmental challenges faced by today's industries. We offer our employees exceptional career development opportunities and an excellent team-oriented working environment.

North Shore is currently seeking a **Junior Environmental Consultant** for our **Reclamation and Remediation Team**, based out of **Sherwood Park, Alberta**.

Key Responsibilities:

- Assist with the coordination and execution of Phase 1, Phase 2, and Phase 3 Environmental Site Assessments through to reclamation certification
- Assist with the development and execution of reclamation, and remediation projects in central and northern Alberta as well as northeastern British Columbia
- Complete vegetation assessments and weed management activities in forested, tame pasture, and cropland settings
- Assist with the coordination and execution of Detailed Site Assessments
- Assist during initial spill response projects as required
- Prepare technical reports
- Provide assistance to senior staff in the office, as required
- Promote our company's vision, mission, and principles

Qualifications:

- 1 – 3 years of consulting experience related to remediation, reclamation, or environmental science
- Good understanding of upstream oil and gas regulatory requirements, particularly reclamation criteria
- Experience with vegetation and weed identification
- Willingness to travel and be in the field for extended periods of time
- Technical Diploma or University Degree in environmental science or related discipline
- Eligibility, to obtain professional designation with an organization such as the Alberta Institute of Agrologists
- Proficient with Microsoft Office Suite and database entry
- Valid driver's licence
- Good physical health and ability to work outdoors in varying conditions
- Willingness to work within a team environment
- Highly organized and have the ability to prioritize multiple tasks

North Shore Environmental Consultants Inc. supports a shared commitment to a Representative Workforce that is respectful and reflective of all staff and clients. North Shore strives to build diversity among our staff to increase our ability to provide high-quality service to our diverse client base.

How to Apply: Please submit your resume via email to careers@northshoreenv.com. We thank all applicants for their interest; however, only those considered for an interview will be contacted. For more information about North Shore, please visit our website at www.northshoreenv.com.

Junior Environmental Consultant

Term: Full-Time

Number of Positions: 1

Application Deadline: October 18, 2019

Job Start Date: ASAP

Job Location: Lacombe



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Environmental Consultants

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North Shore is currently seeking a **Junior Environmental Consultant** for our **Reclamation and Remediation Team**, based out of **Lacombe, Alberta**.

Key Responsibilities:

- Assist with the coordination and execution of Phase 1, Phase 2, and Phase 3 Environmental Site Assessments through to reclamation certification
- Assist with the development and execution of reclamation, and remediation projects in central and northern Alberta as well as northeastern British Columbia
- Complete vegetation assessments and weed management activities in forested, tame pasture, and cropland settings

- Assist with the coordination and execution of Detailed Site Assessments
- Assist during initial spill response projects as required
- Prepare technical reports
- Provide assistance to senior staff in the office, as required
- Promote our company's vision, mission, and principles

Qualifications:

- 1 – 3 years of consulting experience related to remediation, reclamation, or environmental science
- Good understanding of upstream oil and gas regulatory requirements, particularly reclamation criteria
- Experience with vegetation and weed identification
- Willingness to travel and be in the field for extended periods of time
- Technical Diploma or University Degree in environmental science or related discipline
- Eligibility, to obtain professional designation with an organization such as the Alberta Institute of Agrolgists
- Proficient with Microsoft Office Suite and database entry
- Valid driver's license
- Good physical health and ability to work outdoors in varying conditions
- Willingness to work within a team environment
- Highly organized and have the ability to prioritize multiple tasks

North Shore Environmental Consultants Inc. supports a shared commitment to a Representative Workforce that is respectful and reflective of all staff and clients. North Shore strives to build diversity among our staff to increase our ability to provide high-quality service to our diverse client base.

How to Apply:

Please submit your resume via email to careers@northshoreenv.com. We thank all applicants for their interest; however, only those considered for an interview will be contacted. For more information about North Shore, please visit our website at www.northshoreenv.com.

This position will remain open until a suitable candidate is found.

