

Weekly NEWS



An Information Service for Alberta's Environment Industry

The Week Ending April 13th, 2018



Inside this Issue:

- *New Guide – BIC Scale for Assessing PHC in Organic Soil*
- *ESAA Members: Call for Interest – University of Alberta, Faculty of Extension Focus Group*
- *Orphan Well Budget Bumped to \$45 Million*
- *Cities around the World should Prepare for Running out of Water, Experts Say*
- *Remediation Technology News and Resources*
- *New ESAA Members*
- *Upcoming Events*
- *Industry Position Openings*

The ESAA Weekly News is published weekly by:

**Environmental Services
Association of Alberta
102, 2528 Ellwood
Drive SW
Edmonton, AB T6X 0A9
(P) 780.429.6363
(F) 780.429.4249
info@esaa.org
www.esaa.org**

**Comments & submissions
are welcome!**

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

EnviroTech

ENVIROTECH 2018 WRAP-UP

On behalf of the ESAA Board of Directors and staff, thank to everyone who attended and supported the inaugural *EnviroTech*.

Without the support of all the delegates, exhibitors and especially our sponsors an event like *EnviroTech* would not be possible.

Presentations: Presentations are now available online at:
www.esaa.org/envirotech/about/proceedings/

Photos: A few event photos are available online at: www.esaa.org/envirotech/about/photo-gallery/

Charity Results: Thank you for supporting the EnviroTech charity, WILDNorth. With delegate donations and donations in lieu of speaker and moderator gifts, \$5,000 was raised for WILDNorth. If you would like more information or would like to donate to WILDNorth, visit: <http://wildnorth.ca/>

Also, we have all been touched by the tragedy in Saskatchewan and through sadness and grief, Canada and Canadians have come through and pulled together for the families and community. Donations are still being accepted at: www.gofundme.com/funds-for-humboldt-broncos

Planning is underway for a bigger and better **EnviroTech 2019**.



RemTech 2018

**October 10-12, 2018
Fairmont Banff Springs**

Call for Abstracts and Early Registration

ESAA invites you to submit technical abstracts focusing on technologies for the remediation of contaminated soil. Abstracts are encouraged in, but not limited to, the following areas:

- In-Situ and Ex-Situ Treatment
- Physical / Biological / Chemical Treatment
- Soil Washing and Scrubbing

- Thermal Desorption
- Incineration
- Stabilization / Solidification
- Immobilization
- Aeration
- Soil Venting
- Membranes
- Encapsulation
- Vitrification
- Natural Attenuation
- Oil Sands Remediation / Reclamation
- Oil Spills Management
- New Technology and Research
- Remote and Difficult Locations
- Reclamation
- Emerging Contaminants
- Superfund Projects
- Landfill Closure
- Phyto-remediation
- All other related topics will be considered

The preliminary selection of presentations will be based on submitted abstracts and reviewed by a panel of peers.

Abstracts should be no longer than 500 words (not including bio), should include a presenter biography and be submitted as a Word Document by no later than May 31, 2018.

Before submitting your abstract, ensure that client approval has been obtained for your potential presentation.

Send abstract submissions to Joe Chowaniec via email to: info@esaa.org

Notification of acceptance will be given by July 13, 2018.
Full presentations must be submitted by September 28, 2018.

Full details available: www.esaa.org/remtech/agenda/call-for-abstracts/

Early Bird Registration is now open with special delegate rates available for Members and Non-Members. **Register Now and save 20%.** Early bird rate ends June 1st, 2018.

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

NEW GUIDE - BIC SCALE FOR ASSESSING PHC IN ORGANIC SOIL

Alberta Environment and Parks has released the *BIC Scale for Delineating Petroleum Hydrocarbons in Organic Soils and Compost*.

The Biogenic Interference Calculation (BIC) Scale is a mathematical tool for identifying false exceedances of the Alberta Tier 1 soil guidelines for petroleum hydrocarbons (PHC) due to the presence of natural biogenic organic compounds. The BIC Scale is designed for use with organic materials such as peat or compost where false exceedances of PHC guidelines are a particular problem.

The BIC Scale guide is available at:

<http://aep.alberta.ca/land/programs-and-services/reclamation-and-remediation/legislation-guidelines.aspx>

Questions related to the guide may be directed to:
Land.Management@gov.ab.ca

Class II Landfill NOW OPEN



waste management from client-focused environmental consultants

Breton Waste Management Facility
N 1/2 12-48-4-W5M

Accepting industrial and non-DOW oilfield wastes:

- Contaminated soil
- Drilling mud solids/cuttings
- Construction & demolition wastes
- Site remediation/reclamation materials
- Non-hazardous industrial wastes

Advantages of the Breton Class II Landfill:

- Immediate highway access for year-round unimpeded access to the facility
- High grade all-weather roads throughout the facility for minimized turn around time
- Large constructed truck staging area to minimize congestion
- Opportunity to integrate our environmental consulting services in waste management



www.remedx.net | facilities@remedx.net | 403.209.0004

CALL FOR INTEREST! - UNIVERSITY OF ALBERTA, FACULTY OF EXTENSION FOCUS GROUP



UNIVERSITY OF ALBERTA
FACULTY OF EXTENSION

CALL FOR INTEREST FROM ESAA MEMBERS!

Participation in a focus group to discuss emerging opportunities and trends within professional development and continuing education

The Environmental Services Association of Alberta (ESAA) and University of Alberta, Faculty of Extension are pleased to host an upcoming focus group and brainstorming session with environmental industry representatives. The focus group will include discussions on emerging opportunities and trends within professional development and continuing education, as well as ways to improve and enhance the learning options we provide.

This collaborative discussion will serve as a learning and networking opportunity for all involved. We invite you to join us and share your thoughts, needs, and desires as practitioners, employers, talent managers, owners, and consultants.

The University of Alberta and ESAA continually work to provide support to individual practitioners and the environmental industry through relevant and responsive opportunities; our programming is designed to help grow your professional portfolio, potential, and career. Your contributions and strategic advice at this focus group will assist us greatly in identifying the content areas for professional development that means the most to you.

Some discussion topics we will be seeking your feedback on include:

- Skill shortages - now and in the future
- Knowledge gaps - now and in the future
- Course delivery preferences
- Training design desires
- Course content areas (new trends)
- Desired levels of education
- Professional association requirements
- Roadblocks/limitations to professional development
- Assistance for professional development/continuing education

This focus group meeting will be held on Tuesday, May 1st(2018) at the Faculty of Extension's downtown campus; Enterprise Square ([10230 Jasper Ave](#)) in Room 2-590G.

The event will begin at 9:30 am and end at 11:30 am. Refreshments will be provided.

If you are interested, please contact Lisa Kinasewich at kinasewich@esaa.org. Due to limited space, participants will be selected based on best fit.

ORPHAN WELL ASSOCIATION BUDGET BUMPED TO \$45 MILLION

(Source: www.jwnenergy.com) The Alberta Energy Regulator (AER) says it will collect \$45 million to fund the province's Orphan Well Association (OWA) budget for 2018/19.

This is up 50 percent from the 2017/18 budget of \$30 million, announced in February 2017.

"Albertans should never have to pay for wells, facilities, or pipelines to be properly decommissioned and the land returned to an equivalent state. To facilitate this decommissioning, we issued the 2018/19 Orphan Fund Levy today," the AER stated on Twitter on Monday afternoon.

The AER will allocate the year's orphan fund levy among licensees and approval holders included within the Licensee Liability Rating and Oilfield Waste Liability programs based on the April 2018 monthly assessment.

CANADA: \$150K FINE FOR IMPROPER STORAGE OF PETROLEUM PRODUCTS

(Source: HazMat Magazine) It could be a sign of a toughening of enforcement in Canada. A company in Saskatchewan was recently fined \$150,000 for improper storage of petroleum hydrocarbons under the Storage Tank Systems for Petroleum Products and Allied Petroleum Products Regulations, made pursuant to the *Canadian Environmental Protection Act, 1999*. The company, Crop Production Services (Canada) Inc., recently plead guilty to transferring petroleum products into unidentified storage-tank systems. Storage of petroleum products in unmarked containers is a violation of the federal regulations.

In 2016, enforcement officers from Environment Canada and Climate Change conducted an investigation of Crop Production Services (Canada) Inc. During the course of the inspection, they discovered the petroleum product in an unmarked container. No spillage of petroleum product had occurred.

The Court ordered the company to pay a total penalty of \$150,000 to be directed to the federal Environmental Damages Fund. As a result of this conviction, the company's name will be added to the Environmental Offenders Registry.

Crop Production Services (Canada) Inc. (CPS) is a leading provider of agricultural products and services for western Canadian growers. A subsidiary of Nutrien Ltd., CPS provides a wide range of services to the agricultural industry including agronomy Services; crop protection; plant nutrition; precision agriculture; fuel, oil and lubricants; and storage and handling. CPS has over 220 retail locations in communities across Western Canada.

CPS offers Esso bulk fuels to the farm and commercial market across the Prairies through an agreement with Imperial Oil

The Storage Tank Systems for Petroleum Products and Allied Petroleum Products Regulations aim to reduce the risk of contaminating soil and groundwater due to spills and leaks of petroleum products from storage-tank systems. The

regulations require owners and operators to identify their storage-tank systems with an identification number from Environment and Climate Change Canada. This requirement allows an inventory of storage-tank systems to be maintained in a registry that captures the type of tank, the type of piping, and the year of installation of the storage-tank system. Suppliers that deliver petroleum products and allied petroleum products (e.g., thinner for vinyl coatings) are prohibited from transferring petroleum products into any storage tank, unless the storage-tank system identification number is visible.

CITIES AROUND THE WORLD SHOULD PREPARE FOR RUNNING OUT OF WATER, EXPERTS SAY

(Source: CNBC News) It's called "[Day Zero](#)": when Cape Town, South Africa's bustling port city, sees its water taps run dry, and its population thrust into a perilous situation.

Originally projected for this year, the impending crisis has been delayed in part by severe measures — the city instituted restrictions that amount to less than one sixth of an average American's water consumption. Yet despite that effort, "Day Zero" is still projected to [arrive next year](#).

And when it comes, the crisis will see the government switching off all the taps and rationing the resource through collection points.

That future isn't just Cape Town's. It's a scenario cities around the globe may face, experts say.

It may be hard to fathom just how cities could be at risk of a water scarcity crisis when approximately 70 percent of the world is made up of the resource. The stark reality, however, is that the percentage of fresh water probably only amounts to about 2.5 percent, according to often-cited assessments.

Even then, a significant supply is locked up in ice and snow, which means just 1 percent of all fresh water is easily accessible to the global population.

Inequality in access to water is also quickly becoming a problem. While the affluent can find ways to get access to water— through deliveries or in-built tanks — poorer populations are left to their own devices.

That situation oftentimes leads to water theft — for profit, for survival, or for both.

A nation's development has frequently come at the cost of undercutting its sources of clean water, Betsy Otto, director of the World Resources Institute's global water program told CNBC.

"For example, quite a bit of scientific evidence has shown that deforestation changed the hydrological cycle in the Amazon," she said.

Although water scarcity is a very real and pervasive problem, experts said most cities are not immediately at risk of running out of water.

Still, it is extremely important that water scarcity is acknowledged as a global problem because cities should begin working on unique solutions to local problems now, according to Rebecca Keller, a senior science and technology analyst at intelligence firm Stratfor

"It won't be the same exact scenario that Cape Town is facing," Keller said. "It might be pollution, drought, drier climates or significant population growth."

The troubles faced by Cape Town should serve as a "wake-up call" for other countries about the realities of increasing [water stress](#), Otto said.

Water stress occurs when demand for the resource exceeds the available supply. It taxes the reserves and may lead to deterioration of fresh water resources.

In recent years, California [faced a drought](#) that lasted years, Australia survived the [millennium drought](#), and Sao Paulo faced a [water shortage crisis](#) in 2015 due to both drought and inefficient infrastructures.

Otto summed up the global state of preparedness for water scarcity, saying: "We've either under-invested in measures or allowed existing structures to fall apart."

WATER THEFT

The [United Nations'](#) 2010 recognition of water as a human right has complicated the issue of water theft, said Vanda Felbab-Brown, a senior fellow in the foreign policy program at think-tank the Brookings Institution.

"The right to water does not mean the right to free water," Felbab-Brown explained, saying many people had misunderstood the UN. "In the same manner that people have to pay for food, they should expect to pay for safe water."

That sentiment hasn't stopped outright water theft on a large scale in countries like [Brazil](#), [India](#) and [Mexico](#). Companies and individuals illegally tap into pipelines and reservoirs, or they find other ways to avoid water meters.

There's no single solution to the issue, however, as the context of water theft varies between places, Felbab-Brown said. But, she pointed out, better law enforcement, water monitoring, and creating comprehensive databases, are good starting points for governments.

"Governments need to recognize that they can't just apply law enforcement without providing legal alternatives," she added.

As of now, water smuggling mostly operates within countries' borders, but it will eventually occur on an international scale, Felbab-Brown said.

That could become a point of geopolitical tension between countries dealing with transboundary water issues, Keller said.

For an example of international water tensions, take the construction of the Grand Renaissance Dam in the Nile, a \$4 billion hydroelectric project financed by [Ethiopia](#). It's left [Egypt](#) fearing [a potential disruption](#) to its fresh water supply.

CONTROLLING DEMAND

Mitigating water scarcity has proven to be a tricky political subject because, in many countries, environmental or climate solutions tend to have a hard time gathering enough political support to become a reality.

It is also extremely expensive to build out new water supplies, dams and desalination plants.

"Unless there is an acute event — a severe drought for example — it is the [political] constraints that play out in a long time frame," Keller said.

Consequently, many governments have done little to guide their citizens on water-efficient behavior. That can be implemented through price controls, Otto said, but it's rarely a popular measure.

"There should be two tiers of pricing. Conservation pricing, which charges the minimum amount for water that is sufficient for basic needs, should be provided at low rates. Discretionary water use, which is anything beyond the necessary amount, should be charged more," Otto said.

On a national level, she said, governments should encourage conversation about conservation issues. That is, saving water will always be cheaper than building or drilling for new sources, Otto added.

The good news, experts said, is there will be time for governments to start preparing for a Day Zero scenario. "It's not going to be a surprise. The city is not going to run out of water suddenly," Keller said.

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

ITRC Remediation Management of Complex Sites - April 26, 2018, 1:00PM-3:15PM EDT (17:00-19:15 GMT). This training course and associated ITRC guidance: Remediation Management of Complex Sites (RMCS-1, 2017), provide a recommended holistic process for management of challenging sites, termed "adaptive site management." By participating in this training course we expect you will learn to apply the ITRC guidance document to: identify and integrate technical and nontechnical challenges into a holistic approach to remediation; use the Remediation Potential Assessment to identify whether adaptive site management is warranted due to site complexity; understand and apply adaptive site management principles; develop a long-term performance-based action plan; apply well-demonstrated techniques for effective stakeholder engagement; access additional resources, tools, and case studies most relevant for complex sites; and communicate the value of the guidance to regulators, practitioners, community members, and others. For more information and to register, see <https://www.itrcweb.org> or <https://clu-in.org/live>.

Mining Webinar Series: Successful Implementation of Biologically-Based Passive Remediation Systems -Tuesday, May 1, 2018; 2:00-3:30 PM EST (18:00-19:00 GMT). Metal mines at their end of active operations must prepare for the potential long-term treatment of mining-influenced water (MIW). This webinar will highlight how biologically-based passive remediation technologies have been shown to be a cost-effective option for treating MIW, especially mildly- to moderately-impacted waters at low- to moderate-flow rates such as may be found at remote or closed mine sites. Presenters will share an overview of biologically-based passive remediation technologies, their applicability to mining site conditions and illustrate the remedial design and evaluation process with a current treatability study example. In addition, two case study examples of mining sites with operating biologically-based passive treatment systems will be presented: Iron King Mine near Jerome, Arizona, and Garfield Mine near Delta, Colorado. For more information and to register, see <https://clu-in.org/live>.

ITRC Bioavailability of Contaminants in Soil: Considerations for Human Health Risk Assessment - May 3, 2018, 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>.

New Documents and Web Resources

ITRC Releases Three PFAS Fact Sheets. ITRC has released three new PFAS fact sheets:

- Environmental Fate and Transport
- Site Characterization Considerations, Sampling Precautions, and Laboratory Analytical Methods
- Remediation Technologies and Methods

ITRC has developed this series of fact sheets to summarize the latest science and emerging technologies for per- and polyfluoroalkyl substances (PFAS). The fact sheets are tailored to the needs of state regulatory program personnel who are tasked with making informed and timely decisions regarding PFAS-impacted sites. The content

is also useful to consultants and parties responsible for the release of these contaminants, as well as community stakeholders. View or download at <https://pfas-1.itrcweb.org/fact-sheets/>.

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:

- Groundwater Source Zone EISB Construction Completion Report, Casper PCE Plumes Orphan Site, Casper, Wyoming
- Estimating the High-Arsenic Domestic-Well Population in the Conterminous United States
- Dioxin Degradation and Metal Biovolatilization at a Former Wood Treating Site
- NMR-Based Sensors for In Situ Monitoring of Changes in Groundwater Chemistry
- Integration of Filtration and Advanced Oxidation: Development of a Membrane Liquid-Phase Plasma Reactor
- Removal Action Completion Report: Electrical Resistance Heating in Source Area, Former Mercury Cleaners Site Area, [1419 16th Street, Sacramento, California](#)
- Post-Remediation Evaluation of EVO Treatment: How Can We Improve Performance?
- Pilot Studies Report: Former Schilling Air Force Base, Salina, Kansas
- Pilot Study Implementation Report: Lower Columbia Slough-Pacific Meats Cleanup Site, Portland, Oregon
- Rapid Assessment of Remedial Effectiveness and Rebound in Fractured Bedrock
- Ecosystem Services at Superfund Sites: Reuse and the Benefit to Community
- Validation of Passive Sampling Devices for Monitoring of Munitions Constituents in Underwater Environments: Technology User's Manual

New ESAA Members

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

Full Members:

BLG

Borden Ladner Gervais

Borden Ladner Gervais LLP

1900, 520-3rd Avenue SW
Calgary, AB T2P 0R3
Phone: (403) 232-9666

Website: www.blg.com

Chidinma Thompson, Partner
e-mail: cthompson@blg.com

Profile:

Environmental regulation in Canada is a complex, multi-jurisdictional field. At BLG we can help your business navigate this framework, whether you deal directly in environmental matters, you need assistance to comply with regulations, you develop environmental management systems, are considering a major investment, or are completing soil and groundwater remediation projects. BLG's Environmental Law Group can provide you with advice relating to real estate development, oil and gas, petrochemicals, pipelines, public and private power projects, water, natural gas, energy, oil sands, forestry, fisheries, municipal law, land expropriation, emissions, commercial transactions, resource development

and applicable environmental protection and compliance law. Our Environmental Law Group has extensive experience in matters relating to: •complex insurance and civil matters triggered by environmental claims; •drafting and interpretation of environmental policies; •obtaining approvals for projects subject to federal and provincial environmental assessment legislation; and •structuring and management of environmental due diligence exercises. With the strength of a full-service law firm behind them, lawyers in the Environmental Law Group frequently work with their colleagues in other specialized areas, including energy, real estate, bankruptcy and litigation. Together, we can handle your complex commercial transactions, such as negotiation of brownfields acquisitions, divestitures, leasing, financings and re-development, as well as any litigation over contamination, environmental charges or compliance issues.



Forest Technology Systems Ltd

1065 HenryEng Place
Victoria, BC V9B 6B2
Phone: (250) 216-2053

Website: www.ftsinc.com

Bill England, Director of Sales
e-mail: bengland@ftsinc.com

Profile:

About FTS FTS began in 1980 with a focus on the fire weather meteorological niche. Since then, FTS has become a leading manufacturer of remote environmental monitoring systems, instrumentation and communications technology for the Hydrology, Fire Weather and Meteorology industries. Our equipment forms the backbone of some of the world's most sophisticated and demanding environmental monitoring networks. Our mission is to make our customers successful in their efforts to monitor, record, and analyze changes in the natural environment. FTS is the world leader in environmental monitoring solutions for fire weather (weather as it applies to predicting, preventing and managing wildfires). FTS stations are used by 100% of the top 50 government forest management agencies in every corner of the United States and Canada. Our equipment resides for decades in rugged terrain measuring environmental data that is transmitted back to government and private agencies that analyze and use it to make critical decisions. Our technology helps save lives, protects the environment, and is increasingly in demand due to the effects of climate change. We pride ourselves on designing and manufacturing the world's most reliable, easy to use, and simplest to maintain weather monitoring systems. Our headquarters, research and design lab and manufacturing plant are located in Victoria, British Columbia, with a branch office in Blaine, Washington.

UPCOMING EVENTS

THE EXOVA/ELEMENT 20TH ANNUAL ENVIRONMENTAL SEMINAR

Friday 27 April 2018

07:30 – 3:00

Top of the Inn - Delta Edmonton South Conference Center
4404 Gateway Blvd NW, Edmonton, AB

As environmental regulations take an ever greater role in modern business, organizations are facing growing pressure to ensure that their activities adhere to the highest standards of environmental management. Join us at the Delta Edmonton South Conference Center on 27 April to learn about the continually evolving regulations and advancements in the environmental landscape.

With a focus on regulations and guidelines, our key speakers will address changes, challenges, and issues occurring in the environmental industry. A series of presentations will be given to providing critical regulatory updates. We will

tackle hot-button topics ranging from pipelines, wells and blowouts, stakeholder engagement, emerging contaminants, and site specific environmental risk assessments.

Networking sessions will also be held to provide an opportunity to meet and connect with peers and industry experts.

The seminar will help you stay abreast of the latest updates and will give you a chance to earn professional development credits towards your designation.



Exova/Element Alliance 2018 Environmental Seminar - Edmonton Edition

Top of the Inn - Delta Edmonton South Conference Center
4404 Gateway Blvd NW, Edmonton, AB

Registration is \$99.00 + tax | Call to Register

Venessa Kumpula: 780-242-8829

Jessica Becker: 780-438-5522 Ext 24315

April 27th, 2018

7:30 - 8:30	REGISTRATION AND HOT BUFFET BREAKFAST
8:30 - 8:45	INTRODUCTIONS
8:45 - 9:15	AEP regulatory update Norman Sawatsky, Land Reclamation Specialist - Alberta Environment and Parks
9:15 - 9:45	BC OGC Update - CoR manual revision and implementation of CSR stage 10 amendments Devin Scheck, Environmental Supervisor - BC Oil & Gas Commission
9:50 - 10:20	MORNING COFFEE BREAK AND NETWORKING SESSION
10:20 - 10:50	Criteria justification - achieving site closure through stakeholder collaboration Jim Purves, BSc., PAg. - Northshore Environmental Consultants
10:55 - 11:25	Desktop remediation TM, site specific risk evaluation Daniel Gorsic, PChem., CEO - Synergy Aspen
11:30 - 12:30	FULL COURSE LUNCHEON
12:30 - 1:00	Benefits of tier 2 & beyond: the why & how tier 1 shouldn't be the default Trevor Burgers, MSc. PAg., Senior Environmental Scientist - Millennium EMS Solutions
1:00 - 1:30	Needs and challenges associated with remediating soil sterilant affected lands in Alberta Bonnie Dzrodowski, Team Lead Reclamation - Innotech Alberta
1:30 - 2:00	AFTERNOON COFFEE BREAK AND NETWORKING SESSION
2:00 - 2:30	Complex remediation of hydrocarbon and solvents in-situ and ex-situ, waste segregation and worker risk mitigation at a former chemical blending facility Lori Vickerman, M.S.c, P. Biol & Anthony Knafka, M.Sc., P. Biol, DABT - Equilibrium
2:30 - 3:00	Pipelines, wells and blowout, oh my! Challenges assessing a 70 year old oil & gas field for highway upgrading Mike Halliwell, M. Eng. - Thurber Engineering Ltd

Copyright © 2018 Exova, All rights reserved.

How do I register? To register your interest in attending the seminar, please complete the registration form - [Register](#) - Registration is \$99 + tax including meals.

On the day itself, registration will open at 7:30 am with an introduction to the seminar starting at 8:30 am. A hot buffet breakfast and lunch will be provided with snacks and refreshments available throughout the day.

Webinar - Agrasid Soil Information Viewer

Alberta Agriculture and Forestry is hosting an instructional webinar on the Agrasid Soil Information Viewer. The webinar is scheduled for April 24, 2018, at 10:00 am. It will be broken into 3 or 4 different segments, depending on information required, but all segments will be covered during the webinar. Interested practitioners can click on the link below to register.

<https://register.gotowebinar.com/register/4408128322917762817>

The Soil Information Viewer is a compilation of soil maps for Alberta, making them accessible as a searchable map and database. It can give very detailed soil descriptions for a property, be used for measuring area (with GPS coordinates included for ground truthing) and is useful for land planning and mapping purposes. The Viewer includes aerial photography from 1999, 2010 and 2015 (infrared for growing season).

CPANS CONFERENCE 2018 WESTERN CANADA: ENVIRONMENTAL STATE OF THE UNION

Please mark your calendars for the upcoming CPANS Conference.

Date: Wednesday, May 9, 2018
Venue: Ramada Hotel – Downtown, 708 – 8 Avenue, Calgary, Alberta

For more information and to register, visit the CPANS website:
<http://cpans.org/event/2018-cpans-conference-and-agm/>



9th Annual Canadian Water Summit
June 20-22, 2018 – Vancouver

25% Discount for ESAA Members

The Canadian Water Summit attracts professionals from water industry groups across all orders of government, manufacturing, industry associations, cleantech, local communities, academia, and NGOs. Since 2009, CWS has grown into Canada's largest and most diverse annual gathering of business, government, academic, and non-profit water leaders, attracting 300+ attendees each June. For more information visit: <http://www.watersummit.ca/>

To register visit: mysubscription.ca/CWS/ ESAA members save 25% - use the discount code - ESAA2018

Industry Positions Openings

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

ENVIRONMENTAL Assessment, Remediation (Soil or Groundwater) and Reclamation Specialists CALGARY & EDSON, ALBERTA



Number of Positions: 1

Application Deadline: April 30, 2018

Job Start Date: May 7, 2018

Earthmaster Environmental Strategies Inc. is focused on serving the upstream oil and gas and commercial-industrial sectors in Western Canada. We are a multi-disciplinary consulting firm offering an exceptional team-oriented working environment, a comprehensive compensation package and an opportunity for excellent career development and growth.

We are seeking a **Junior** and **Intermediate** level soil and/or groundwater assessment and remediation professional **and** a **Junior** professional wanting to specialize in disturbed site reclamation to work in our Calgary or Edson offices.

Applicants with agricultural, environmental and forestry backgrounds/degrees with field and office experience in the above noted disciplines will be an asset.

RESPONSIBILITIES:

Manage site specific projects:

- Develop work plans and associated budgets with supervisor
- Co-ordinate, supervise and execute field work
- Prepare technical reports
- Responsible for on-site safety supervision and reporting
- Work with land owners, clients and external contractors
- Collaborate with staff located both in head office and satellite offices
- Provide leadership in the activities you undertake
- Maintain excellent client communications and service
- Effectively track and adhere to project budgets
- Participate in business development
- Mentor junior staff as applicable

QUALIFICATIONS:

- University degree or technical diploma in a relevant discipline
- Professional designation or eligibility for a designation such as RPF, P.Eng., P.Geol., P.Ag., P.Chem, etc. are an asset
- Minimum 1 year of field experience
- Previous experience working for a consulting firm or related industry
- Strong communication skills and excellent written and oral (English) skills
- Well-developed interpersonal skills including problem solving, decision making and stress management
- Reside in Edson, Calgary or surrounding areas
- Willingness to be away from home base for extended periods of time
- Valid driver's license and clean drivers abstract
- Desire to provide excellent client service and a commitment to project management excellence

How to Apply:

Please forward cover letter and resume to:

Earthmaster Environmental Strategies Inc.
#200, 358 – 58 Avenue SW
Calgary, AB T2H 2M5
Email: earthmasterhr@gmail.com
Web: www.earthmaster.ca