AER RELEASES INDUSTRY WATER USE REPORT TO DRIVE IMPROVED PERFORMANCE

The Alberta Energy Regulator (AER) has released a new report on how the province’s energy industry uses water all in an effort to drive improved performance from the industry.

The Alberta Energy Industry Water Use Report provides data on water used in a number of production methods for oil and gas (from hydraulic fracturing and enhanced oil recovery [EOR]) and mineable and in situ oil sands.

“Albertans depend on us to make sure the energy industry is using water in a responsible manner,” said Jim Ellis, the AER’s president and CEO. “This report provides Albertans with a better understanding of how water is being used to produce oil, gas, and bitumen.”

Generally, companies are using less water than what is allocated to them. In 2016, 10 per cent of all nonsaline water (i.e., shallow groundwater or water taken from a lake or river or run-off collection pond) in Alberta was allocated to energy development. Of that, roughly 22 per cent was used, meaning that only 2.2 per cent of all nonsaline water allocated in the province was used for energy development last year.

The amount of water used has remained unchanged since 2013, even while hydrocarbon production increased by 44 per cent.

The report shows that oil sands mining continues to be the largest user of nonsaline water. Over the past five years, an average of 2.7 barrels of water was needed to produce one barrel of oil equivalent (BOE), compared with hydraulic fracturing, EOR, and in situ which averaged less than 0.5 barrels of water per BOE.

The report also highlights industry efforts to recycle water resources. In 2016, EOR and in situ recycled roughly 90 per cent of all water used, as both technologies operate on a cycle where water and steam is continuously injected into the same wells. Hydraulic fracturing recycled about six per cent of all water used due to the limitations of storing or transporting hydraulic fracturing fluids. Although oil sands mining recycles water using tailings ponds, data is unavailable because companies are not required to report this information to the AER.

“While companies have made considerable efforts to reduce, reuse, and recycle water, we believe that public reporting on water use will improve industry performance and encourage companies to recycle more water in their operations,” said Veronique Giry, vice president of Industry Operations.

“The important next step for us is to start comparing how companies in Alberta use water to gain a better understanding of the gap between the amount of water they are allocated and the amount they use and where appropriate to try and reduce that gap,” said Giry. “We’ll use this data to hold companies accountable, by reviewing their water applications with greater scrutiny and measuring them against their peers.”

The Alberta Energy Industry Water Use Report is the second report to be released under the AER’s industry performance program, which launched last year to measure, evaluate,
and report on energy development activities that the AER regulates, and to help improve operator performance.

The Alberta Energy Regulator ensures the safe, efficient, orderly, and environmentally responsible development of hydrocarbon resources over their entire life cycle. This includes allocating and conserving water resources, managing public lands, and protecting the environment while providing economic benefits for all Albertans.

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**ALBERTA ENERGY REGULATOR TO RECONSIDER SUNCOR TAILINGS PLAN IT REJECTED**

(Source: Calgary Herald) Alberta’s energy watchdog has agreed to reconsider a plan by Suncor Energy to clean up its tailings ponds so as to take into account new technology the oilsands giant plans to use.

The Alberta Energy Regulator in March denied the Calgary-based company’s plan for its Millennium mine. But the regulator said in a letter to a Suncor vice-president this week that it has reviewed the company’s request for reconsideration and decided that it would be appropriate in this case.

Tailings ponds contain waste resulting from oilsands extraction and contain water, fine clay particles, residual bitumen and other chemicals. Alberta Energy estimates oilsands mining projects had created about 220 square kilometres of tailings ponds by the end of 2013.

Suncor had proposed to treat 75 per cent of its Millennium mine’s tailings by clumping fine particles together and covering that material with fresh water.

In its rejection of the plan, the energy regulator called water-capping an unproven method and said more information was needed about its risks, benefits, alternatives and reclamation timelines.

The regulator now says it was not aware at the time of technology Suncor plans to use and it should be considered in an assessment.

The method involves using flocculants and coagulants to separate particles from water and to firm them up before placing them at the bottom of a mined-out pit.

The pit is then filled with fresh water and made into a lake that can support an aquatic ecosystem and recreation. Suncor aims to keep harmful chemicals trapped beneath the lake bottom for good.

“At the time the applications were filed, our evaluation of that process was still in development, so we couldn’t describe the process in great detail in terms of how it would work,” said company spokeswoman Sneh Seetal.

The regulator said it accepts Suncor’s explanation for why it couldn’t share details prior to getting a patent.

“The AER would ask that Suncor inform the AER of any such restrictions and potential delays so as to avoid this situation in future,” the letter reads.

“Given these unusual circumstances, the AER will reconsider the applications.”

The energy regulator introduced new rules last summer that require companies to have tailings ponds ready to reclaim within 10 years of the end of a mine’s life. Those rules replaced more stringent tailings pond regulations put in place in 2009 that the industry said it couldn’t meet.

Nina Lothian, a senior analyst at the clean-energy think-tank Pembina Institute, said details about Suncor’s technology only address a small part of what was lacking in the company’s plan.

“It’s concerning that the AER reneged on their initial denial based on this one additional piece of information,” she said.

“The issues that were raised on the Suncor plan are actually endemic of all the tailings management plans that have been submitted by industry.”
Tim Gray, executive director of Environmental Defence, said oilsands operators are proposing to use water-capping because it’s a relatively inexpensive way to deal with tailings.

“You just put more water on top of them and walk away and hope nature fixes it, but of course we don’t have any evidence to show that works,” he said.

“We’re creating this huge future environmental and financial liability for the Alberta and the Canadian taxpayer based on unproven technology.”

**INDIGENOUS VOICES SUPPORT ENVIRONMENTAL MONITORING IN ALBERTA**

The Indigenous Wisdom Advisory Panel will advise Fred Wrona, Alberta’s Chief Scientist, about how to incorporate Indigenous perspectives and traditional ecological knowledge into environmental monitoring.

The inaugural panel includes academics, industry experts, Elders and a former Truth and Reconciliation Commission of Canada commissioner. The seven-member expert panel is the first legislated advisory body of its kind in Canada.

“First Nations and Metis are vital to Alberta’s resource economy, but have been historically shut out of environmental monitoring decisions. This panel is a step towards a holistic approach to monitoring, built on a commitment to the United Nations Declaration on the Rights of Indigenous Peoples.” - Shannon Phillips, Minister of Environment and Parks

“The government’s creation of this panel of Indigenous wisdom holders and western scientists is an example of the winds of change sweeping across the nation. As we focus on a sustainable environment for the next seven generations of Albertans, it’s an exciting period in history to be a panel committee member.” - Elmer Ghostkeeper, Indigenous Wisdom Advisory Panel member

Legislated in spring 2016, the panel’s mandate is the product of months of collaboration with the panel following a blanket ceremony at Government House in October. The mandate includes several unique features, including a consensus-based process for giving collective advice and a recognition of the importance of both oral and written communication.

Twice a year, the Indigenous Wisdom Advisory Panel will meet with the Chief Scientist to discuss how to improve approaches to applying Indigenous wisdom in environmental monitoring. The same legislation governs the Science Advisory Panel, which will assess the scientific quality of environmental monitoring.

“Indigenous wisdom is fundamental to measuring, assessing and informing on the condition of Alberta’s environment. By braiding the advice of the Indigenous Wisdom Advisory Panel with that of the Science Advisory Panel, we will create long-term environmental monitoring programs that reflect both scientific experts and Indigenous communities.” - Fred Wrona, Chief Scientist, Environment and Parks

“The Science Advisory Panel is pleased to see the Government of Alberta’s continued commitment towards independent environmental monitoring. We recognize the value of Indigenous and local knowledge in helping interpret the environment around us and the changes taking place. This joint meeting between the two panels is an exciting step towards a new approach to Alberta’s environmental monitoring, evaluation and reporting system.” - Jill Baron, chair, Science Advisory Panel

The members of the Indigenous Wisdom Advisory Panel are:

- Leroy Little Bear - Elder and senior adviser to the president, Aboriginal Initiatives, University of Lethbridge
- Elmer Ghostkeeper - Elder and council member, Buffalo Lake Metis Settlement
- Henry Lickers - Elder and environmental science officer, Mohawk Council of Akwesasne
- Harley Bastien - president, Harmony Walkers, Inc.
- Reg Crowshoe - Piikani First Nation Elder and professor of Indigenous Studies, University of Calgary
- Melody Lepine - director, Mikisew Cree First Nations, Industry Relations
- Wilton Littlechild - Grand Chief of Treaty 6 and lawyer, commissioner with the Truth and Reconciliation Commission of Canada
ONTARIO COMPANY AND OWNER FINED $60,000 FOR FAILING TO REPORT SPILL
(Source: HazMat Magazine) The Ontario Ministry of the Environment and Climate Change (MOECC) recently reported that Tactical Ordnance Inc. and Casey Brouwer pleaded guilty to one offence each and were fined a total of $60,000 for failing to give notice of a discharge or spill of a pollutant to the ministry, contrary to the Environmental Protection Act (EPA).

Tactical Ordnance Inc. (the company) specializes in custom gunsmithing, performance firearms, and tactical specialty products for law enforcement and civilians and is located in the Township of King (the site).

Casey Brouwer is the owner, president and sole officer and director of the company.

On May 12, 2016, the company and Mr. Brouwer had control of the pollutant CS powder, which was accidentally spilled from a container resulting in a discharge into the air at the site.

CS powder is an irritant that is used as a component of some types of tear gas for riot control purposes.

A childcare centre is located next door to the site. At the time of the discharge, approximately sixteen children and two childcare staff members were outside the childcare centre on a playground.

Wind blew the CS powder onto the playground causing the children and staff to experience adverse effects including sore and burning throats, coughing, difficulty breathing and watering eyes.

Mr. Brouwer and the company failed to report the discharge to the ministry and failed to provide details regarding quantity of discharge, source and location, the cause and circumstances of the discharge, and the known hazards and adverse effects of the CS powder, as required by the Act.

Subsequently, the matter was referred to the ministry's Investigations and Enforcement Branch. Following an investigation, the defendant was convicted.

On April 28, 2017, Tactical Ordnance Inc. and Casey Brouwer were convicted of one offence each. The company was fined $50,000 plus a victim fine surcharge of $12,500, and Mr. Brouwer was fined $10,000 plus a victim fine surcharge of $2,500, with six months to pay the fine.

ONTARIO CONTRACTOR FINED $600,000 FOR DISCHARGING SEDIMENT INTO ADJACENT STREAMS
(Source: HazMat Magazine) 2280577 Ontario Inc. (formerly Naylor Renewable Energy Inc.) recently pleaded guilty to three offences and was fined $600,000 for causing or permitting the discharge of sediment-laden stormwater and impairing the quality of the water, failing to notify the Ontario Ministry of the Environment and Climate Change (MOECC) of the discharge, and failing to employ best management practices for stormwater management, sediment and erosion control as required by the ministry approval, contrary to the Ontario Water Resources Act (OWRA) and the Environmental Protection Act (EPA).

In May 2012, the ministry issued a Renewable Energy Approval (REA) authorizing the construction of a 10 megawatt solar farm known as the Hamilton Solar Facility (HSF) located in Hamilton Township.

As a result of contractual arrangements between the REA holder and various companies, 2280577 Ontario Inc. assumed the primary responsibility to implement and monitor the measures as stipulated in the stormwater management, erosion and sediment control plan, as required by the REA.

Construction of the HSF site began in 2013 and continued beyond 2014. In late March 2014, ministry staff responded to a complaint by inspecting the HSF site. Ministry staff observed that the erosion and sediment control measures were inadequate.

2280577 Ontario Inc. was advised that stormwater and erosion controls must be enhanced, a sediment control inspection program must be established and implemented, and that any spills or discharges must be reported to the ministry.
On April 2, 2014, in response to a further complaint and to determine whether mitigation measures had been successfully implemented, ministry staff conducted another inspection at the HSF site. At that time, ministry staff observed inadequate or improperly maintained erosion and sediment control measures that permitted the discharge of sediment-laden water to nearby streams.

Ministry staff observed that snow melt flow was discharging silt-laden water directly into a tributary of Brook Creek and across a farmer’s field to a culvert that connects to the tributary of Baltimore Creek.

Further inspections on April 29, 2014 and June 11, 2014 observed turbid, silt-laden water again being discharged from the HSF site into the two tributaries, with water samples indicating that the concentration of suspended solids were greatly elevated at the site and downstream.

Based on the information collected during these inspections, a ministry Surface Water Scientist concluded that the discharges of sediment-laden water from the HSF site caused the impairment of the headwaters of both creek tributaries a distance of approximately 2 km in Brook Creek Tributary and approximately 4 km in the Tributary of Baltimore Creek.

The ministry investigation determined that the erosion and sediment control measures installed by the company were insufficient or inadequate to prevent the discharges from occurring.

It was also determined that the discharge that occurred April 2, 2014 was not reported by 2280577 Ontario Inc. to the ministry's Spills Action Centre (SAC), as required by the Act.

In addition, the investigation concluded that 2280577 Ontario Inc. did not comply with the Construction Plan Report submitted in support of the REA application, and that best management practices for stormwater management, sediment and erosion control were not employed, which contravened the ministry approval.

On May 15, 2017, 2280577 Ontario Inc. was convicted of three offences, was fined $600,000 plus a victim fine surcharge of $150,000 and was given 30 days to pay the fine.

**REMEDIATION TECHNOLOGY NEWS AND RESOURCES**

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

**Upcoming Live Internet Seminars**

**ITRC Issues and Options in Human Health Risk Assessment - A Resource When Alternatives to Default Parameters and Scenarios are Proposed** - June 6, 2017, 1:00PM-3:15PM EDT (17:00-19:15 GMT). After participating in this ITRC training course, the learner will be able to apply ITRC's Decision Making at Contaminated Sites: Issues and Options in Human Health Risk (RISK-3, 2015) document when developing or reviewing site-specific risk assessments by: identifying common issues encountered when alternatives to default parameters and scenarios are proposed during the planning, data evaluation, toxicity, exposure assessment, and risk characterization and providing possible options for addressing these issues; recognizing the value of proper planning and the role of stakeholders in the development and review of risk assessments; and providing information (that includes links to additional resources and tools) to support decision making when alternatives to default approaches, scenarios and parameters are proposed. For more information and to register, see [http://www.itrcweb.org](http://www.itrcweb.org) or [http://clu-in.org/live](http://clu-in.org/live).

**ITRC Integrated DNAPL Site Characterization** - June 8, 2017, 1:00PM-3:15PM EDT (17:00-19:15 GMT). The Integrated DNAPL Site Characterization Team has synthesized the knowledge about dense nonaqueous phase liquid (DNAPL) site characterization and remediation acquired over the past several decades, and has integrated that information into a new document, Integrated DNAPL Site Characterization and Tools Selection (ISC-1, 2015). This guidance is a resource to inform regulators, responsible parties, other problem holders, consultants, community stakeholders, and other interested parties of the critical concepts related to characterization approaches and tools for collecting subsurface data at DNAPL sites. After this associated training, participants...
will be able to use the guidance to develop and support an integrated approach to DNAPL site characterization, including: identify what site conditions must be considered when developing an informative DNAPL conceptual site model (CSM); define an objectives-based DNAPL characterization strategy; understand what tools and resources are available to improve the identification, collection, and evaluation of appropriate site characterization data; and navigate the DNAPL characterization tools table and select appropriate technologies to fill site-specific data gaps. For more information and to register, see http://www.itrcweb.org or http://clu-in.org/live.

Analytical Tools and Methods: Session III - Fate and Transport of Contaminants - June 12, 2017, 1:00PM-3:00PM EDT (17:00-19:00 GMT). This webinar series highlights innovative analytical tools and methods developed and used by Superfund Research Program (SRP) grantees. During the third session of the series, speakers will highlight tools and methods to detect contaminants and measure their fate and transport in the environment. The speakers will highlight work related to polychlorinated biphenyls (PCBs), per- and polyfluoroalkyl substances (PFASs), chlorinated solvents, and other chemicals in the environment. Presenters include: Keri Hornbuckle, Ph.D., University of Iowa SRP Center; Jennifer Guelfo, Ph.D., Brown University SRP Center; and Mark Brusseau, Ph.D., University of Arizona SRP Center. For more information and to register, see http://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:

- Technical Memorandum: ISB Phase I and ISCO Phase II Results and Downgradient Area Pilot Study Work Plan
- Screening of PFASs in Groundwater and Surface Water
- Glowing Crystals Can Detect, Cleanse Contaminated Drinking Water
- Aquatic Contaminant and Mercury Simulation Modules Developed for Hydrologic and Hydraulic Models
- Best Practices for Environmental Site Management: Recommended Contents of a Groundwater Monitoring Report
- Definition and Procedure for the Determination of the Method Detection Limit, Revision 2
- Coal Plant Decommissioning: Plant Decommissioning, Remediation and Redevelopment
- In-Situ Capping of Contaminated Sediments
- Long-Term Contaminant Management Using Institutional Controls

EUGRIS Corner. New Documents on EUGRIS, the platform for European contaminated soil and water information. More than 6 resources, events, projects and news items were added to EUGRIS in May 2017. 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.

UPCOMING EVENTS

*NEW University of Alberta credentials*
Further your education and technical capacities with environmentally focused specialized courses.

Our NEW Professional Development Series respond to the demands from industry professionals for relevant, responsive continuing education.
Soil Science Series = complete all 4 – 39 hour courses* for University credential
- Applied Soil Physics EXERM 4281 = November 20 - 24
- Applied Soil Fertility EXERM 4284 = November 27 – December 1 (Calgary course)
- Applied Soil Chemistry EXERM 4282 = January 29 – February 2
- Classification & Mapping of Soils EXERM 4297 = TBD (Spring 2018)
https://www.ualberta.ca/extension/continuing-education/programs/environmental-studies/soil-science

Water Resource Management = complete all 4 – 39 hour courses* for University credential
- Wetland Delineation, Classification & Assessment EXERM 4280 = September 18 – 22
- Applied Hydrology EXERM 4256 = February 23 – March 4
- Applied Hydrogeology in Alberta EXERM 4291 = TBD (Spring 2018)
- Classification & Mapping of Soils EXERM 4297 = TBD (Spring 2018)
https://www.ualberta.ca/extension/continuing-education/programs/environmental-studies/water-resource

*Courses also recognized with the Environmental Resource Management Certificate.

Engineering Technology Series = completion of each individual course includes University credential
- Trenchless Technology 101 EXGEN 4798 = September 28
- Microtunneling & Pilot Tube Microtunneling EXGEN 4799 = October 26
- Geotechnical Consideration for Underground Construction EXGEN 4800 = February 15
- Pipe Materials for Trenchless Construction EXGEN 4801 = March 22
- Horizontal Directional Drilling EXCPE 4781 = TBD (Spring 2018)
https://www.ualberta.ca/extension/continuing-education/programs/environmental-studies/engineering-technologies

All courses are available as ‘open studies’ with no prerequisites or admission required.

Select courses are recognized by the Alberta Institute of Agrologists as senior level agrology courses related to entrance into the profession, and to augment core knowledge requirements related to a practice area, as well as continuing competence and professional development options.

Our courses are also recognized by a variety of organizations for professional and continuing education credits including: APEGA, ASPB, CAPF, ASET, ECO Canada

Want more information? Please contact us at: email: erm@ualberta.ca  Phone: 780.492.3158 (or) 780.492.5532 or our Website: uab.ca/erm

FALL 2017 Environmental Resource Management Certificate courses

Wetland Delineation, Classification & Assessment – EXERM 4280 (39 hours) Sept 18 - 22 8:00 – 5:00
Instructor: Kristen Andersen
- Through lecture, classroom and field exercises, students can expect to learn methods to identify wetlands and delineate their boundaries based on indicators of vegetation, soils, and hydrology, in addition to conducting desktop delineations through aerial photo interpretation. Other topics to be covered include wetland classification, impact and assess reports, and relative-value assessments. There is a mandatory field trip requirement within this course. Prior knowledge of soils and vegetation is helpful, but not required.

Environmental Geology – EXERM 4252 (24 hours) Sept 22 – Oct 1 (F) 6 – 9 pm
Instructors: Hilary Corlett & Steven Pauley (S) 9 – 5 pm
- Environmental Geology is the study of the earth's environment from a geologic perspective. It explores the effect of humankind's activities on the surface environment. The earth's underlying formations impact much of what humankind does. Surficial and subsurface geologic formations effect our water use, water and subsurface pollution, and waste disposal options. This course will introduce you to the geologic formations in Alberta and how those formations present environmental problems and opportunities.

Intro to Soils – EXERM 4307 (24 hours) Oct 12 – 28 (F) 6 – 9 pm (S)
Instructor: Les Fuller
9 – 3 pm
This course includes an overview of soil formation and soil classification with emphasis given to soils of Western Canada. Additional topics will include basic soil chemical, physical and biological properties and processes. Soil make-up and why air and water are important components of soil will also be included, water holding and transmission, soil nutrient cycling by microorganisms, effects of salt on soil properties, and soil interactions within ecosystems will also be covered. Course concepts will provide a broad understanding of soil science as preparation for more specialized soil and environmental sciences courses.

Fundamentals of GIS – EXERM 4274 (24 hours)  
Oct 17 – 19  
https://www.ualberta.ca/extension/continuing-education/courses/EXERM-4274  
8:30 – 4:30 pm  
Instructor: Erik Ellehoj  
- Enhance the performance of your measuring, mapping, modeling, and monitoring by tapping the power of Geographic Information Systems (GIS). Learn the concepts that drive GIS, the basics of cartography, and the differences between various GIS packages. Upon successful completion of this course, you will be able to determine what types of files can be loaded in a GIS; how GPS can be used within a GIS environment; locate geographic files for specific purposes; understand discrepancies between NAD 27 and NAD 83.

Applied Soil Physics – EXERM 4281 (39 hours)  
Nov 20 – 24  
https://www.ualberta.ca/extension/continuing-education/courses/EXERM-4281  
8:00 – 5:00 pm  
Instructor: David Chanasyk  
- This course will introduce students to the basic concepts of applied soil physics, with an emphasis on the quantitative aspects. Basic physical aspects of both the solid and liquid phases of soils as well as how water is held by soils and how it moves through soils, will be covered. The course will examine the link between the soil water regime and processes within the hydrologic cycle, with emphasis on infiltration and the soil physical properties affecting this key hydrologic process. Soil management challenges that involve soil physics and how to manipulate soils to enhance their physical properties will also be examined.

Applied Soil Fertility – EXERM 4284 (39 hours) **Calgary course**  
Nov 27 – Dec 1  
https://www.ualberta.ca/extension/continuing-education/courses/EXERM-4284  
8:00 – 5:00 pm  
Instructor: Rigas Karamanos  
- The course will address the relevance of soil fertility including the importance of soil fertility in plant growth and nutrient uptake by crops. The agronomic significance of soil physical, chemical, and biological properties as they pertain to soil fertility will be discussed. Topics will include major nutrients, as well as secondary and micronutrients, and corresponding fertilizers. The course will also examine soil fertility evaluation: soil testing; the backbone of soil fertility and problems soils (acid and saline soils). Soil management challenges including fertilizer application, water use efficiency, interactions amount nutrients, and economics of plant-nutrient use will be addressed.

Environmental Law – EXERM 4260 (24 hours)  
Nov 30 – Dec 2  
https://www.ualberta.ca/extension/continuing-education/courses/EXERM-4260  
8:30 – 5 pm  
Instructor: Jason Unger  
- If your work impacts the natural environment, involves the development of natural resources, or addresses environmental health issues, it is important to have an understanding of the laws which regulate these areas. This course is intended to assist participants in navigating through the complex and often confusing array of Federal, Provincial, common law, and environmental regulatory schemes by providing an introduction to these 4 key areas of law, which impact environmental/resource/health regulation in Canada - constitutional law, civil law, regulatory law and administrative law. Note: This course is not intended as an in-depth review of any specific legislation.

Remediation Innovative Technology Seminar (RITS), Honolulu, HI, July 11-12, 2017. The RITS is the Department of the Navy (DON) showcase for the latest Environmental Restoration (ER) technologies, methodologies, and guidance. The seminar is geared toward Remedial Project Managers (RPMs), but other Department of Defense (DoD) personnel, federal/state/local regulators, and contractors with an active DON ER contract are welcome to attend. The RITS will be conducted at several locations through July 12, 2017. The 2017 RITS topics include: Risk Communication for Per- and Polyfluoroalkyl Substances (PFAS) Sites; Innovations in In Situ Sediment Remediation; Light Nonaqueous Phase Liquid (LNAPL) Site Management - How to Use Tools to Support Monitored Natural Attenuation and Risk-Based Closure; Natural Attenuation Processes at the Groundwater-Surface Water Interface; Demonstrating a Geophysics Strategy for Minimally Invasive Remediation Performance Assessment; and Enhanced
Groundwater High-Resolution Site Characterization (HRSC), San Francisco, CA, June 13-14 & Dallas, TX, November 15-16, 2017. This training course focuses on groundwater characterization and discusses (1) the impacts of subsurface heterogeneity on the investigation and cleanup of groundwater and related media, (2) the need for scale-appropriate measurements and adequate data density, and (3) the tools and strategies that are available to overcome the impacts of subsurface heterogeneity. After taking this course, participants will be armed with information that will allow them to improve their subsurface investigation approaches and develop more realistic and comprehensive conceptual site models (CSM). CSMs developed based on HRSC strategies and tools will decrease site uncertainty, improve the remedy selection process for groundwater remedies, and better enable the evaluation, design, and implementation of targeted in situ and ex situ groundwater remedies. The Groundwater HRSC course is an advanced 2-day course. The recommended audience includes EPA, federal, state, tribal and private industry technical project managers, practitioners and other stakeholders involved in groundwater investigation and remediation. For more information and to register, see https://trainex.org/hrsc.

Best Practices for Site Characterization Throughout the Remediation Process, Dallas, TX, August 1-3 & New York, NY, September 12-14, 2017. This training course is based on best management practices (BMP) implemented by the U.S. EPA, partnership organizations, federal and state partners, and consultants. Participants will learn how to streamline projects in a legal, technically sound, and cost-effective manner. By taking the course, participants achieve the following objectives: integrate best practices into traditional project activities; effectively collect and communicate critical project information; design dynamic work strategies; recognize and overcome the challenges presented while implementing a dynamic work strategy; and use BMPs to support all phases of the environmental cleanup life cycle. For more information and to register, see https://trainex.org/offeringslist.cfm?courseid=1515.

National Environmental Monitoring Conference (NEMC), Washington, DC, August 7-11 2017. The theme of the 2017 conference is “Effectively Communicating Scientific Information.” NEMC is held annually as a part of the Environmental Measurement Symposium - a combined meeting of the NEMC and The NELAC Institute (TNI)’s Forum on Environmental Accreditation. The Symposium is co-sponsored by TNI under a cooperative agreement with the U.S. EPA. Some of the highlights for the week include: a special half-day general session focused on the conference theme; over 160 oral and poster presentations on a variety of cutting-edge environmental monitoring issues; meetings of TNI Committees to further TNI efforts on environmental laboratory accreditation, proficiency testing, and accreditation of field sampling and measurement organizations; an exhibit program showcasing the latest innovations in environmental monitoring; special keynote presentations on topics of general interest; and an open meeting of EPA’s Environmental Laboratory Advisory Board. For more information and to register, see http://www.nemc.us.

Industry Positions Openings

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

Intermediate Environmental Consultant

Term: Full-Time
Number of Positions: 1
Application Deadline: May 31, 2017
Job Start Date: Immediately
Job Location: Sherwood Park

Key Responsibilities:

- Assist with the coordination and execution of Phase 2 and Phase 3 environmental site assessments through to reclamation certification.
Coordinate and supervise small and large scale reclamation and remediation projects
Coordinate and complete detailed site assessments and groundwater monitoring
Complete vegetation assessments and supervise weed management activities in forested and cropland settings
Coordinate and supervise tree planting of reclamation sites
Prepare and submit daily cost tracking and project status reports
Prepare detailed technical reports, work plans, and cost estimates
Implement corporate and client safety programs
Ensure that project requirements are met in a timely and effective manner
Support other environmental service line projects, as required

Qualifications:

- Extensive experience in the execution and supervision of Phase 2 and Phase 3 environmental site assessments in Alberta
- Comfortable working around various types heavy equipment and supervising small and large scale reclamation projects
- Solid understanding and working knowledge of the upstream oil and gas regulatory requirements in Alberta
- Experience with the utilization of the Alberta Tier 2 Soil and Groundwater Remediation guidelines
- Knowledge and/or training using the Subsoil Salinity Tool
- Strong vegetation identification and soil characterization skills
- Willingness to travel and be in the field for extended periods of time
- Technical Diploma or University Degree in environmental science or related discipline
- Possess excellent verbal and written communication skills
- Proficient with Microsoft Office Suite and database entry
- Valid driver’s license
- Good physical health and ability to work outdoors in varying conditions
- Self-motivated and have a willingness to succeed within a team environment
- Highly organized and have the ability to prioritize multiple tasks

Preference will be given to candidates with 5 or more years of directly related experience in the upstream oil and gas industry and who are eligible to obtain a professional designation. Previous experience with managing various assessment, reclamation, and remediation projects will also be considered an asset. Compensation will be based upon candidate experience.

North Shore 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

Temporary Junior Environmental Consultant

Term: Temporary
Number of Positions: 1
Application Deadline: June 12, 2017
Job Start Date: May 2017
Job Location: Calgary

North Shore Environmental Consultants Inc. (North Shore) is a progressive environmental company that specializes in providing environmental management services to the oil and gas industry. 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 has an immediate opportunity in our Calgary office for a Temporary Junior Environmental Consultant. The term of this position is 5 months with the possibility of an extension.

Key Responsibilities:

- Assist with the development and execution of site-specific assessment and reclamation projects in Alberta
- Complete detailed site assessments in forested, native prairie, and cropland settings
- Complete daily cost tracking and project status reports
- Implement corporate and client safety programs
- Ensure that project requirements are met in a timely and effective manner
- Provide assistance to senior staff in the office, as required

Qualifications:

- Willingness to travel and be in the field for extended periods of time
- Technical Diploma or University Degree in environmental science or related discipline
- Excellent communication, writing, and problem solving skills
- Proficient with Microsoft Office Suite and database entry
- Good understanding of upstream oil and gas regulatory requirements
- 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

Preference will be given to candidates with one or more years of experience in the upstream oil and gas industry and who are eligible to obtain a professional designation. Experience with operating ATVs and UTVs will also be considered an asset. Compensation will be based upon candidate experience.

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

Environmental Technician

Term: Full-Time
Number of Positions: 1
Application Deadline: June 14, 2017
Job Location: Edmonton

Advisian is the independent consulting business line of WorleyParsons with more than 2,000 people in 19 countries. We provide solutions for clients in the Hydrocarbons, Minerals & Metals, Chemicals and Infrastructure industries. We have combined the deep technical consulting capabilities of WorleyParsons Consulting, Select and INTECSEA with our existing strategy and management consulting expertise. As part of one of the world’s largest engineering firms, we continue to push boundaries and extend our capabilities globally. WorleyParsons is a company that prides itself on providing safe and high-quality services that exceed our customer’s expectations, which is why we manage some of the world’s leading projects. Our aim is to recruit, develop, and most importantly, retain the people who share our vision and strategy.

Overall Responsibilities and Key Accountabilities

- Completion of Phase 1 and 2 environmental site assessments;
- Preparing supporting documentation for reports, data checking, liability assessments;
- Assisting in the design and implementation of environmental monitoring and remediation projects;
- Assisting in and supervising the excavation of contaminated soil;
- Groundwater and surface water monitoring;
- Leading drilling, borehole logging and monitoring well installations;
- Reclamation experience would be considered an asset;
- On-site safety supervision and associated documentation;
- Assisting Project Managers in all aspects of project execution and performing tasks as requested efficiently and accurately, using standard methods and techniques;
- Tracking and reporting on field activity;
- Procurement of project supplies and contractor services;
- Supervision of contractors on site; and
- Travel as required for various field programs.

Qualifications
- Technical Diploma and/or Degree;
- 3-5 years’ experience;
- Ability to work challenging and potentially extended hours under varying weather conditions;
- Working toward certification (e.g. Technologist-in-Training) or recently certified; and
- Member of The Association of Science and Engineering Technology Professionals of Alberta (ASET), Association of Professional Engineers and Geoscientists (APEGA) or other technical society would be an asset.

Advisian (part of the WorleyParsons Group) offers an excellent remuneration & benefits package, a friendly, professional, dynamic and flexible work environment along with the opportunity to develop your career prospects within Canada and overseas.

We strive to be an industry leader in health, safety and environmental performance. Our vision is to achieve zero harm to people and assets, and zero environmental incidents. We select people who share our values, beliefs and commitment to this vision and who demonstrate the expected behaviors, competencies and performance associated with their prospective roles within the company.

How to Apply: Apply directly to posting:
https://worleyparsons.taleo.net/careersection/ext/jobdetail.ftl?job=EDM00K2&tz=GMT-04%3A00

We thank all candidates for their interest; however, only those selected for interviews will be contacted. Advisian (part of the WorleyParsons Group) is an equal opportunity employer.

Environmental Technologist

Term: Full-Time
Number of Positions: 1
Application Deadline: June 14, 2017
Job Location: Cold Lake

Advisian is the independent consulting business line of WorleyParsons with more than 2,000 people in 19 countries. We provide solutions for clients in the Hydrocarbons, Minerals & Metals, Chemicals and Infrastructure industries. We have combined the deep technical consulting capabilities of WorleyParsons Consulting, Select and INTECSEA with our existing strategy and management consulting expertise. As part of one of the world’s largest engineering firms, we continue to push boundaries and extend our capabilities globally. WorleyParsons is a company that prides itself on providing safe and high-quality services that exceed our customer’s expectations, which is why we manage some of the world’s leading projects. Our aim is to recruit, develop, and most importantly, retain the people who share our vision and strategy.

Overall Responsibilities and Key Accountabilities
- Completion of Phase 1 and 2 environmental site assessments;
- Preparing supporting documentation for reports, data checking, liability assessments;
- Assisting in the design and implementation of environmental monitoring and remediation projects;
- Assisting in and supervising the excavation of contaminated soil;
- Groundwater and surface water monitoring;
- Leading drilling, borehole logging and monitoring well installations;
- On-site safety supervision and associated documentation;
- Assisting Project Managers in all aspects of project execution and performing tasks as requested efficiently and accurately, using standard methods and techniques;
- Tracking and reporting on field activity;
- Procurement of project supplies and contractor services;
- Supervision of contractors on site; and
- Travel as required for various field programs.
Qualifications
- Technical Diploma and/or Degree;
- 3-5 years’ experience;
- Ability to work challenging and potentially extended hours under varying weather conditions;
- Working toward certification (e.g. Technologist-in-Training) or recently certified; and
- Member of The Association of Science and Engineering Technology Professionals of Alberta (ASET) or other technical society would be an asset.

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How to Apply: To apply visit: https://worleyparsons.taleo.net/careersection/ext/jobdetail.ftl?job=EDM00K2&tz=GMT-04%3A00

We thank all candidates for their interest; however, only those selected for interviews will be contacted. Advisian

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**Academic Chair, Water Sustainability**

**Term:** Full-Time  
**Number of Positions:** 1  
**Application Deadline:** August 31, 2017  
**Job Location:** Calgary, AB

At the Southern Alberta Institute of Technology (SAIT), we are the shapers. The makers. The originals, driven by a passion for excellence and impact. We are a global leader in applied education, an Alberta Top Employer and a destination workplace for people empowered to make a difference in the lives of students. We offer action-based learning, solution-focused research and enterprising collaborations with partners from around the world. With a newly launched brand and ongoing celebrations marking 100 years of educating skilled workers, now is an exciting time to join this one-of-a-kind place…SAIT.

SAIT’s MacPhail School of Energy is the first school of energy in Canada and one of only a handful of energy schools in North America. Its industry-relevant program offerings, highly qualified industry-trained faculty, state of the art technical lab facilities, and outcome-based curriculum makes it an excellent hands-on training ground for our graduates.

We currently have an exciting and unique opportunity for an Academic Chair to develop, manage and provide leadership for a portfolio of water sustainability programs and courses that will progress into a center of knowledge for sustainable water resource stewardship in Alberta! This is a unique opportunity to develop first class programming concerning the investigation, communication, and instruction of water usage, contamination and treatment issues in Alberta and beyond with a current focus on innovation in industrial water management.

Reporting to the Associate Dean, you will be accountable for managing and providing leadership for program activities, collaborating on departmental and institutional strategic goals and initiatives, including but not limited to, academic excellence, learner experience, innovation and research integration, stakeholder/market focus and community connections.

**Our Ideal Candidate:**  
With a passion for water, environment, and circular economy, you are a strategist that can build alignment and long-term partnerships; in fact, you are energized by going after substantial goals and engaging your team to
accomplish them. You are passionate about learning, mentorship, and giving back to your industry and community. You get applied learning, maybe, you are even a SAIT grad. You are known for your creativity, drive, and results orientation. You are connected locally but think globally. You are passionate about the future of the energy sector, and want to contribute to its transformation by preparing the next generation of energy professionals that will shape our world. If you believe this unique role is for you, please tell us in your cover letter how your career experience prepared you for this role!

Responsibilities:

- Actively engage and integrate faculty, research and students in research projects related to water
- Act as a subject matter expert for the water sustainability program, lead the creation of a water hub and establish and support a center of knowledge
- In consultation with industry and knowledge network members, develop and deliver flexible modularized training to industry and partner organizations.
- Embark on strategic activities required to establish SAIT as a global leader in industrial water management.
- Participate in the investigation, communication, and instruction of water usage at SAIT and at external stakeholder events, conferences and forums.
- Collaborate on water initiatives that focus on contamination, treatment, usage, efficiency, and sustainability both within and outside of Alberta
- Identify and obtain industry and government funding to support water sustainability programming.
- Liaise with the Applied Research and Innovation Services (ARIS) department at SAIT, as well as other departments, agencies and institutions.
- Oversee all aspects of resource management, scheduling and recommendations for program growth based on market demand to ensure an effective learning environment.
- Foster the development of a strong faculty team by leading performance management and coaching faculty on teaching excellence in the classroom, including professional development plans and recognition.
- Manage employee recruitment, orientation, scheduling and supervision of faculty.
- Support and promote initiatives that enhance learner success and retention within the program, such as active learning, technology-enabled learning, online or blended delivery.
- Oversee the recruitment, retention and tracking of student academic progress.
- Evaluate learner satisfaction results and develop action plans for improvement where necessary.

Qualifications:

- Minimum Master's Degree in a relevant field of study; PhD preferred
- Currency and technical expertise in water
- Minimum 10 years' of research or leadership experience related to water
- Experience leading complex projects or initiatives reliant on collaboration with multiple internal and external stakeholders.
- Strong collaborator and team player, able to deliver results and leverage networks.
- Excellent written and verbal communication skills, including presentation skills.
- Strong ability to communicate complex scientific concepts to diverse audiences.
- Equivalent combinations of education and experience may be considered.

Why Work at SAIT:
Enjoy a stimulating work environment, a beautiful campus overlooking downtown Calgary and a great benefits package including: comprehensive health and dental coverage, a defined benefit pension plan, professional development programs, generous paid time off, free access to our Wellness Centre, transit subsidies and more.

To Apply: Please continue with the online application process through the SAIT careers website or Workopolis.com. Online applications are strongly preferred.

Closing Date & Time: This competition will remain open until a suitable candidate has been found.

If you have any questions about the role please contact noorin.mitha@sait.ca. Please do not apply to this email address; all applications should be made through our online system.

Notes:

- SAIT is committed to equity and diversity within its community and invites applications from all qualified applicants.
- For information on the collection and use of your personal information, please see our Privacy Policy. Click on AD 1.1.1. Personal Information – General Guidelines.

SAIT’s vision is to be a global leader in applied education.
**Water Resource Planner**

**Term:** Full-Time  
**Number of Positions:** 1  
**Application Deadline:** June 15, 2017  
**Job Location:** Edmonton, AB

Your background is in water resources (surface water hydrology and water quality, with experience in environmental assessment, water resources management, and watershed planning) as part of multi-disciplinary teams. You have experience managing projects and can apply Alberta’s regulatory processes to projects across disciplines and client sectors. You have a critical mind for business strategies, and proven abilities to generate work and new opportunities.

We offer a culture that promotes entrepreneurial spirit within the stability of a well-established company. Our growing Edmonton office provides many professional development and advancement opportunities for those with an aptitude for consulting.

Responsibilities will include the following:

- Serving as the technical lead and/or Project Manager on projects within the fields of water resources management and environmental assessment
- Generating new business opportunities and maintaining client relationships in the industrial, municipal, and commercial sectors;
- Contributing to and leading multi-disciplinary projects, and working closely with other aquatic professionals
- Supporting the development of the team and mentoring staff
- Working with a dynamic team of environmental scientists and engineers

Candidates should have the following qualifications:

- Masters degree in a relevant discipline (e.g. physical geography, earth science, hydrotechnical or agricultural engineering, or hydrology)
- Scientific background in surface water hydrology and water quality, with experience in environmental assessment, water resources management, and watershed planning
- Registration with a professional organization in Alberta
- Minimum 8 years’ post-graduation experience in environmental consulting
- A demonstrated leader with a track record of work winning and contributing to the growth and sustainability of a team
- A strong understanding of relevant provincial and federal legislation, regulation and permitting processes

**How to apply:** Please submit your cover letter and resume to: Human Resources Associated Engineering – Associated Environmental Inc. 5 00, 9888 Jasper Ave, Edmonton, Alberta, T5J 5C6 E-Mail: hr-env@ae.ca Please include position title and location in the subject line.

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**Assessment & Remediation Professional #17-11RM**

**Term:** Full-Time  
**Number of Positions:** 1  
**Application Deadline:** June 30, 2017  
**Job Start Date:** Immediately  
**Job Location:** Grande Prairie

Assessment and Remediation Professional #17-11 RM – Full Time

**Experience:** Millennium EMS Solutions Ltd. (MEMS) is looking for an assessment and remediation professional with a directly applicable Bachelor’s degree. A minimum of 3 to 5 years of directly related experience in environmental site assessment and remediation, preferable in a consulting environment, is required. Knowledge and experience with relevant provincial and federal legislation and familiarity with the environmental site assessment process would be an asset. Preference will be given to those candidates who are capable at
completing field work, have strong writing and interpersonal skills, organizational abilities and technical competency. The successful candidate must be self-motivated with a strong work ethic and be able to work effectively in a multi-disciplinary setting. MEMS presents opportunities to be cross-trained in other areas of MEMS technical disciplines and provides mentoring in the application of Tier 2 guidelines and site specific risk assessments. Participation in field assessments in a variety of land uses including urban settings to remote areas with difficult terrain and under extreme weather conditions could be required. In addition, the successful applicant will need to possess a valid, non-GDL Class 5 Drivers license. The successful applicant must also be a member or eligible for membership in a relevant professional organization.

**Reports to:** Environmental Scientist

**Based at:** Grande Prairie, AB

**Job Purpose:** The position requires a combination of office and field work (40/60 split) in a consultancy environment. This position is available immediately and duties include the following responsibilities:

- Planning, organizing and the completion of field programs for ESA’s and remediation projects, including soil and groundwater assessments;
- Contractor supervision to implement ESA and remediation projects;
- Accurate field cost tracking of expenses and contractors;
- File compilation, organization of field data, interpretation of laboratory results and report writing;
- Preparation of reports including Tier 2 guideline modifications or application of site specific guidelines for remediation;
- Completion of file reviews, site inspections and preparation of Phase 1 Environmental Site Assessment reports;
- The ability to work independently or in a team setting; and
- The ability to make responsible decisions with the support and mentoring of senior staff.

Millennium EMS Solutions Ltd. (MEMS) is a dynamic environmental consulting company offering outstanding opportunities and long term career advancement. Currently MEMS employs over 90 employees in various disciplines including, hydrogeologists, engineers, soil scientists, foresters, vegetation ecologists, auditors, biologists, air quality experts, regulatory analysts and reclamation specialists. The successful candidate will be part of the MEMS Assessment and Risk team. MEMS utilizes an integrated approach that emphasizes cross training of disciplines to allow for efficiencies in data collection and assessment, and provides MEMS professionals with enhanced technical skills. There are over 35 professionals in our geoscience and risk disciplines. Look for us on the web at [www.mems.ca](http://www.mems.ca).

**How to Apply:** Please send your resume with a covering letter/email referencing the position number and title to the attention of Human Resources at humanresources@mems.ca. We thank all applicants for their interest however only those candidates selected for an interview.

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**Environmental Advisor / Specialist**

**Term:** Full-Time  
**Number of Positions:** 1  
**Application Deadline:** June 20, 2017  
**Job Location:** Red Deer

At our Joffre site, near Red Deer, Alberta, we are seeking an individual to join our Environment and Regulatory Team to assist the Manufacturing West facilities in ongoing environmental performance improvement. This role will be responsible for the site fugitive emissions/leak detection and repair (LDAR), source emission and ozone depleting substances (ODS) programs.

**Responsibilities:**

As an environmental specialist, you will be working collaboratively with the Environment team members and personnel in the operating unit to provide sustainable solutions and identify proactive improvement opportunities.

The key areas of responsibility include but are not limited to:
- Leak Detection and Repair/Fugitive Emissions program; managing field contractors, monitoring data, leak reports, plant P&ID drawing and improvement projects
- Stack/source emission testing; managing field contractors, monitoring data and regulatory reports
- Ozone Depleting Substances program; managing the ODS inventory and ensuring compliance with regulations
- Complete both internal and regulatory compliance reporting on time and to an acceptable standard
- Apply relevant Responsible Care standards, policies and procedures
- Support NOVA Chemicals sustainability initiatives and develop and promote environmental improvement
- Work with multi-discipline teams (eg. operations, maintenance, engineering, leadership, regulators, etc.) and build positive relationships
- Coach and assist others in the interpretation and application of related policies, procedures and regulations
- Collaborate with environmental program specialists regarding work in the plants: scheduling, work notifications, unit orientations, equipment operation, etc.
- Provide additional support to the Environment and Regulatory Team including but not limited to field work and data analysis involving noise monitoring, soil, groundwater, waste and surface/potable water, wildlife management

**Qualifications:**
The successful candidate will possess a Bachelor of Science degree (preference Environmental Science) with 3 – 7 years of direct experience in an applicable or related industrial or manufacturing environment.

- Preference will be given to candidates’ whose most recent experience is in environmental management/monitoring
- Previous experience supporting multi discipline teams in a plant and/or industrial setting
- Previous experience with air quality – fugitive emissions, continuous emissions monitoring and source emissions testing
- Excellent communication and organizational skills as demonstrated with previous employers
- Comfortable interacting with internal and external audiences, with the ability to take initiative to build positive relationships
- Demonstrated analytical and troubleshooting skills
- Ability to interpret technical documentation and apply general knowledge of environmental monitoring principles
- Self-motivated, focused on results, with the ability to work independently as well as collaborate with others
- Ability to adapt to new situations and challenges and embrace change and new ideas

**About Us:**
NOVA Chemicals develops and manufactures chemicals, plastic resins and end-products that make everyday life safer, healthier and easier. Our employees work to ensure health, safety, security and environmental stewardship through our commitment to sustainability and Responsible Care®. NOVA Chemicals, headquartered in Calgary, Alberta, Canada, is a wholly owned subsidiary of The International Petroleum Investment Company (IPIC) of the Emirate of Abu Dhabi.

The NOVA Chemicals Joffre Site is located in Central Alberta, near Red Deer (Alberta’s third largest city). The Joffre Site is recognized as the largest combined ethylene/polyethylene manufacturing site in North America, and one of the largest in the world. Focus at the site is placed on operations excellence, plant availability and effective capital execution. Attention is also placed on the integration of technology while implementing and optimizing.

The Joffre site provides a wealth of recreational and social opportunities in the surrounding areas, as well as various educational options for children through advanced learning.

**Benefits:**
NOVA Chemicals’ flexible benefit programs are designed to meet the diverse needs of our employees, because when it comes to benefits, everyone has different priorities. Our benefits offerings will vary based on your work location, and are an element of the “Total Rewards” package used to reward employees.

**Application Details:** To apply online, please visit [www.novachem.com/careers](http://www.novachem.com/careers)

*NOVA Chemicals*
Project Manager

Term: Full-Time
Number of Positions: 1
Application Deadline: June 21, 2017
Job Location: Calgary

North Shore Environmental Consultants Inc. (North Shore) is a progressive environmental company that specializes in providing environmental management services to the upstream oil and gas industry. 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 has an immediate opportunity in our Calgary office for a fulltime Project Manager. This role will involve a combination of office and field work with a focus on upstream oil and gas clients.

Key Responsibilities:

- Manage and execute site-specific assessment, remediation, and reclamation projects across Alberta.
- Interpret assessment data and develop appropriate reclamation and remediation strategies in collaboration with Senior Environmental Consultants.
- Prepare cost-tracking, budget, and project status reports.
- Communicate with clients, government, and project stakeholders on an ongoing basis and foster relationships.
- Prepare detailed technical reports, project recommendations, and cost estimates.
- Assign workloads to junior personnel and ensure assigned tasks are completed to North Shore standards.
- Mentor and train junior staff and ensure corporate and client safety programs are followed.
- Liaise with laboratories, contractors, and other service providers as required.
- Ensure that project requirements are met in a timely and effective manner.

Qualifications:

- Highly organized and have the ability to prioritize multiple tasks.
- Minimum of seven (7) years of upstream oil and gas consulting experience.
- Solid understanding and working knowledge of the upstream oil and gas regulatory requirements in Alberta.
- Strong vegetation identification and soil characterization skills in forested, cultivated, and native prairie lands.
- Extensive experience with assessment, reclamation, and remediation projects.
- University Degree or Technical Diploma in environmental science or related discipline.
- Possess excellent verbal and written communication skills.
- Proficient with Microsoft Office Suite and database entry.
- Self-motivated and have a willingness to succeed within a team environment.

Preference will be given to candidates who possess or who are eligible for a professional designation. Previous project management experience in the environmental industry will also be considered an asset. Compensation will be based upon candidate experience.

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.