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**WATERTECH 2015 - NEW WEBSITE AND DRAFT PROGRAM NOW AVAILABLE**

April 20-22, 2015  
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ESAA is pleased to announce that the program for **WaterTech 2015** is now available online: [www.esaa.org/watertech](http://www.esaa.org/watertech). The 2015 program includes 53 technical presentations that include

- Special Oil Sands Session
- 12 other technical sessions focusing on *Pipelines, Wetlands, Groundwater, Municipal, Water Management, Modelling, Wastewater, and more.*

In addition, the *WaterTech* website has been completely rebuilt, updated and is now easier to use. Check it out and tell us what you think.

**WaterTech 2015** will also feature three keynote presentations:

**Opening Keynote**

**"Hydroclimatic Change"**

**Robert Sandford**

Director of the Western Watersheds Research Collaborative, and an associate of the Centre for Hydrology at the University of Saskatchewan

**Tuesday Lunch Keynote**

**Bob McDonald**

Host of CBC's *Quirks and Quarks*

### Wednesday Lunch Keynote

**Philippe Cousteau**

Co-Founder and President, EarthEcho International

**Sponsorship Opportunities:** A limited number of sponsorship opportunities are still available. For additional details visit: <http://www.esaa.org/watertech/sponsors/>

**Registration:** To register visit: [www.esaa.org/watertech/](http://www.esaa.org/watertech/) Already 50% Sold Out!

### **LEADER DRY CLEANERS (ALL HAPPINESS HOLDINGS LTD.) SENTENCED FOR VIOLATING ENVIRONMENTAL REGULATIONS**

EDMONTON, Jan. 27, 2015 /CNW/ - Leader Dry Cleaners (All Happiness Holdings Ltd.), a dry cleaner operating in Edmonton, Alberta, pleaded guilty on January 26, 2015, in Alberta Provincial Court of Justice, for violating the [Tetrachloroethylene \(Use in Dry Cleaning and Reporting Requirements\) Regulations](#) of the *Canadian Environmental Protection Act, 1999 (CEPA, 1999)*.

The violation was identified during an inspection by Environment Canada enforcement officers in 2013.

The company pleaded guilty and was fined \$25,000 for improper storage of tetrachloroethylene, a toxic substance, commonly known as PERC. The fine will be paid to the Environmental Damages Fund. As a result of this conviction, the company's name will be added to the Environmental Offender's Registry.

#### **Quick Facts**

- Tetrachloroethylene (PERC) is a dry-cleaning solvent, and is designated as a toxic substance under CEPA, 1999, as it *has* the potential to contaminate ground and surface water.
- The Environmental Offenders Registry contains information on convictions of corporations registered for offences committed under certain federal environmental laws. The Registry contains convictions recorded for offences committed since June 18, 2009—when the *Environmental Enforcement Act* received Royal Assent.
- CEPA, 1999, is an important part of Canada's body of federal

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environmental legislation. It is an Act respecting pollution prevention and the protection of the environment and human health in order to contribute to sustainable development.

- The Environmental Damages Fund (EDF) is administered by Environment Canada. It was created in 1995 to provide a mechanism for directing funds received as a result of fines, court orders, and voluntary payments to priority projects that will benefit our natural environment. All fines paid as a result CEPA, 1999, offences are directed to EDF.

### **RESEARCHER FINDS DEEP RISKS UNDER THE OILSANDS**

(Source: Edmonton Journal) When he started tromping around Alberta's northeast forests, geochemist Ben Cowie was determined to figure out why there was so much salty water and heavy brine in the oilsands area.

Three years later, the University of Calgary graduate (now with a PhD and moved to Harvard) is causing ripples in the oilpatch with a paper recently published in an American Association of Petroleum Geologists Bulletin.

Cowie's research points to a potentially new hazard for oilsands developers — instability in a narrow corridor from Fort McMurray south east to Cold Lake.



The image shows a large industrial facility with several tall smokestacks emitting white plumes of smoke against a blue sky with scattered clouds. The Maxxam logo, 'A Bureau Veritas Group Company', is in the top left corner. A green banner at the bottom of the image reads 'Fast & Reliable Stack Testing for the Oil Sands Industry'. To the right of the banner is a small inset image of a 'WELCOME TO FORT McMURRAY' sign with the slogan 'WE HAVE THE ENERGY'.

The upward flow of salty water indicates salt-rock layers that lie under the oilsands have been recently eroded. That in turn leaves instability and possibly fracture weakness in the rocky bitumen layers above.

"It's like if you dig a tunnel under a subdivision, not every house will have problems, but some will," explains Cowie.

His work, now getting industry attention, could point to the need for new regulations to make extraction safe for workers and the environment in potentially unstable areas.

The corridor follows the dissolving edge of an ancient salt formation called the Prairie Evaporite — the basement of the oilsands.

Water moves up from the deep Devonian layer (containing the salt rock) into the bitumen layer (the McMurray formation). The flowing water dissolves the salt rock, creating sinkholes underground and leaving the layers above with weaker support.

Three major incidents have occurred along this edge, Cowie says, most recently, at CNRL's Cold Lake site, where bitumen is still oozing to the surface.

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The cause is likely that caprock — which operators count on as a seal to keep steam pressure and bitumen below ground — is weakened and losing support because of the collapsing salt formations underneath.

In 2010, Shell hit a gusher of salt water from the deep Devonian layer while it was excavating a tailings pond at its Muskeg mine.

In 2006, an underground blowout at Total's Joslyn mine left a larger crater.

These signal the geology and water movement underneath the bitumen is complicated, he says. "You should be looking for caprock hazards where there has been recent dissolution of the evaporite."

The signal for those weak spots is the high level of salinity in the water, he says.

"In places where there is high salinity there are active conduits that permit water to erode the rock. So that high salinity could signal weakness in the rock."

If that's the case, that's an area to avoid or at least to take extra precautions, he says.

So more research is needed to identify such places, Cowie adds.

Cowie put it this way in his 2014 paper released to the oil industry, Predicting Vertical Connectivity: "Several major unexpected incidents of steam, brine, or bitumen discharge have occurred in the Athabasca Oilsands Region during development of oilsands resources.

"These discharge events include steam blowouts into overburden, brine eruptions into tailings ponds, and bitumen discharges into surface waters.

"These incidents can have high economic costs that range from large-scale remediation efforts to abandonment of entire projects.

"A key objective of this work is developing a general predictive model to identify areas where karst (salt erosion) features are active, and where vertical connectivity (upward flow of water) is most likely."

So where is the salt water coming from?

To answer that, Cowie goes back 10,000 years to the retreat of the last glaciers. As the glaciers thawed, the melt water was forced deep down by the weight of the ice, through the McMurray bitumen layer and into the Devonian (salt rock layer).

A lot of the erosion of the Devonian layer salt rocks happened when the water was forced down, but Cowie shows it continued when the water began to flow up after the pressure of the ice lifted.

"It's like a Jenga tower: if you take out some pieces, the tower weakens."

For months after discovering the four Primrose leaks in spring 2013, CNRL was adamant the bitumen leaking at four sites could not get to the surface through the caprock.

Cowie notes caprock is generally a good seal around bitumen, but not if it is weakened by collapsing, dissolved layers of salt rock underneath (also known as a karst process).

As Cowie says in his paper: "Upward flow of highly saline waters requires mass removal from the underlying evaporite (salt) units, resulting in increasing void space underlying the McMurray Formation, and possible fractures or faulting."

The July 24 report of an independent review panel on the CNLR leaks confirmed that cracks in the caprock are possible avenues for bitumen oozing to the surface.

"Naturally occurring geological features may be of particular importance in Primrose east where the formations have been affected by salt dissolution," the report says.

Frances Hein, the chief geologist of the Alberta Geological Survey, says there is already plenty of good data on hazards around the Prairie Evaporite and it is routinely used by the Alberta Energy Regulator.

Hein notes she mapped the unstable edge of the salt formation in a paper about 15 years ago. Cowie's research contains no surprises, but may help define the edge in more detail, she adds.

But oilsands companies seeking project approvals are already required to evaluate the risks of any project, including caprock hazards — "it is something that is standard and routine," Hein adds.

Meanwhile the Alberta Energy Regulator is busy developing new caprock criteria in an area north of Fort McMurray and has put projects for five leaseholders there on hold.

Oil companies are having a close look at new research by Cowie and others to determine "geohazards" associated with Prairie Evaporite dissolution.

A major industry organization, Canadian Oilsands Innovation Association, set up a Devonian Aquifer Working Group last year to collaborate on analysis of much of this new data.

"Recent recognition of the profound effect of the underlying Devonian geology" on the bitumen layers is leading to a lot of research, noted Nexen Energy's Michael Rogers in a paper at a 2014 geology convention where Cowie also presented.

"The removal of much of the Prairie Evaporite in the area has created additional complexity in operating in situ recover projects."

Cowie says he's encouraged by the industry interest in that dissolving edge of the salt formation.

"They're taking a good look at what is lying beneath their deposits and that's important to do," said Cowie.

"I'm glad they are working on it. There needs to be more attention paid to the dissolution edge."

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### ***SALTY WETLANDS DANGER SIGN FOR IN SITU OILSANDS PROJECTS***

#### ***But they may ease reclamation issues for oilsands mines***

(Source: Edmonton Journal) EDMONTON - Swatting swarms of summer bugs, Corey Wells hiked through thick black spruce forest southeast of Fort McMurray. After following a hydro line, he wound his way through seismic lines slashed in the bush for about ten kilometres.

Finally, Wells and colleagues reached the edge of the trees and paused to look over a lovely clearing with ponds, flowers and grasses — a normal wetland, or so it seemed.

On a closer look, he noticed white salt crusts on the ground and bright red flowers, called samphire, typically found in salty water along ocean coastlines.

Then he tasted the water — ick! It tasted like rotten eggs and was soon determined to be saltier than sea water here in the middle of landlocked Alberta.

"It's a very beautiful, and very atypical wetland and it's incredibly salty," said Wells, a hydrologist from the University of Waterloo.

Wells, who wrote his master's thesis on the hydrological connectivity of the wetland, was accompanied on that 2011 visit by researchers from the University of Alberta, Wilfrid Laurier University and Colorado State University.

Other salty wetlands have been documented in the oilsands region, but saline spring wetlands like this are typically found near large rivers, such as the Athabasca, where local salt deposits are close to the surface.

Far from a river, this salty spring wetland supports lots of vegetation, some rare plants and plenty of birds, foxes. Moose have been seen along the shore.

And right next to the salt wetland sits freshwater wetland. How does that happen?

It partly happens because in this spot there is a plume of salty water bubbling up from underground. How far down it starts is not known.

The discovery of the salty spring wetlands is significant for two reasons — it's potentially a big helping in reclamation efforts and it's a warning of possible hazards for oilsands producers who store contained waste water underground.

Wells is on a team headed by U of W professors, Jonathan Price and Richard Petrone, working on the feasibility of building man-made wetlands to replace the thousands of hectares of fens, swamps and peatlands torn up for the open pit mines.

It's the holy grail of reclamation. The big mining companies need a way to restore the cleared land to a close semblance of its original state, including forests and wetlands that took decades to form.

That means finding a way to build new wetlands with a faster time frame.

The U of W researchers are working on a Suncor trial project — a three-hectare fen (the most common type of wetland) that is fed by a 32-hectare man-made watershed. Imperial and Shell are also involved.

Last summer, the team planted vegetation, according to the company's website.

Petrone says the scientists mostly studied freshwater wetlands in their quest to build a wetlands with long term survival.

"We need to know the man-made systems will carry on as permanent features. So what are the indicators that show it will last?"

But uncovering the secrets of this unusual salty wetland will be a huge help, he says. There's a lot of saline matter left in the old mines so if wetlands can be built that contain a level of salinity, "there's hope," says Petrone.

"Salinity is a potential issue in the post-mining landscape."

The scientists will figure out what kind of grasses will tolerate salty conditions, for instance, he said. Then they have to figure out how to scale up the project to a regional level.

For oilsands companies the salt wetland has another significance.

The plume of salty water flowing up means there may be a connection, through all the many rock layers, to the surface from an ancient salt layer (the Prairie Evaporite Formation) sitting below the bitumen layers.

That means there's a potential pathway for waste water to move it up to the surface, says Wells.

The growing ranks of in situ operators, (not the big miners) are looking to store waste water underground. They send steam and chemicals down into the ground to melt the bitumen so it can be pumped to the surface. they then store the waste water underground.

Companies look carefully for locations where the waste water, also called process water, will be safely trapped, says Wells. But the hydrogeology underground is complicated and it's possible for the waste water to migrate.

If it runs into a plume of water flowing upward, then the contaminated water could be carried up and pollute surrounding wetlands.

"If the process water migrates far enough or finds its way to an aquifer discharging to the surface, it's possible to make it back into environment," said Wells.

"Operators need to take into consideration the location of the springs and their potential connections to subsurface storage zones.

“That way we can prevent the re-surfacing of process water back into the natural environment.”

The hazard will grow in the future. About 80 per cent of the oilsands will be extracted with in situ process so the demand for underground storage of waste water will increase in years ahead.

It will be important to find and map the location of these unique salty springs so companies can avoid the hazard, he added.

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### ***RESEARCH SUGGESTS CLIMATE CHANGE THREATENS ALBERTA WETLANDS***

(Source: Global News) EDMONTON – New research suggests that climate change is threatening to turn Alberta’s huge northern wetlands into vast expanses of bush and shrub, altering the province’s freshwater cycle and releasing large amounts of greenhouse gases into the atmosphere.

“You are losing a really important landscape,” said Nick Kettridge of the University of Birmingham, lead author of the paper published Tuesday in *Nature*.

Kettridge and his co-authors took advantage of a ready-made controlled experiment in northern Alberta’s boreal forest.

In 1983, a fen — a type of peat wetland that covers thousands of square kilometres in the province’s north — was partly drained to encourage forestry. The amount of drainage roughly corresponded to the amount of drying expected to occur as warming temperatures increase evaporation from the landscape.

Then, in 2001, a wildfire burned through the area, which affected both drained and undrained parts of the fen. Ten years after the fire, the undrained fen was recovering nicely. Peat burned in the fire was being replaced, storing carbon and offsetting the carbon released in the fire.

The drained part of the fen, however, took a completely different path.

**READ MORE:** [Report released on climate change impacts on Alberta](#)

The amount of water-storing moss was down by 77 per cent. The water table was more than 20 centimetres lower. The entire site had been overgrown with willow and poplar bush, further restricting the growth of moss by shading the ground and covering it with shedded leaves.

The two areas had less than 10 per cent of their vegetation in common.

That shift to a shrub ecosystem, spread out over a large area, would completely change how the landscape reacted to wildfire.

Healthy fens, because they store so much water, slow a fire’s progress and limit its ferocity. Willows and poplars present no such inhibitions.

That creates a feedback loop likely to speed up the conversion of fen to scrub forest, releasing millions of tonnes of carbon, said Kettridge.

Wildfires are expected to increase as climate change takes increasing hold of the boreal forest. The annual area burned in the boreal doubled between 1960 and 1990 and is expected to double again by 2100.

Although his study didn’t look specifically at the issue, Kettridge said the drying out of the Peace-Athabasca delta from upstream dams could be adding to the climate change effect.

“If you’ve got land management, climate change and wildfire on top of that, there’s a potential for a triple effect.”

Kettridge said the study suggests authorities should try to manage the landscape in ways that don’t cause further drying. He said they could also try to limit the impact of wildfires through firefighting or using controlled burns to limit the amount of available fuel.

Wetlands are vital, not only for carbon storage, but other ecological services, Kettridge said.

They buffer and stabilize river levels and filter surface water. They prevent erosion and provide habitat and nutrients for animals. Some ecologist liken them to the earth's kidneys.

"We're investing huge amounts of money within the U.K. to reclaim and restore these systems," Kettridge said.

"This is one study, one unique opportunity to see the potential response. But it has implications for our understanding about how a broad range of these fen systems and peatland systems are likely to respond into the future."

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### ***WOODMAN'S SEA PRODUCTS LIMITED PLEADS GUILTY TO AN OFFENCE UNDER THE CANADIAN ENVIRONMENTAL PROTECTION ACT, 1999***

**January 28, 2015 – Harbour Grace, Newfoundland – Environment Canada** On January 26, 2015, Woodman's Sea Products Limited was fined \$100,000 after pleading guilty in Harbour Grace, Newfoundland, provincial court to an offence under the Canadian Environmental Protection Act, 1999 (CEPA, 1999). The offence occurred in July 2012, and included the disposal of crab processing waste material contrary to section 125 of CEPA, 1999, which requires an Environment Canada-issued disposal at sea permit.

As per amendments to CEPA, 1999, resulting from the Environmental Enforcement Act, this corporation received a mandatory minimum fine of \$100,000. This fine will be directed to the [Environmental Damages Fund \(EDF\)](#). The mandatory minimum penalty is aimed at promoting compliance with federal environmental legislation. As a result of the conviction, the company's name will be added to the Environmental Offender's Registry.

#### **Quick Facts**

- CEPA, 1999, is an important part of Canada's body of federal environmental legislation. It is an Act respecting pollution prevention and the protection of the environment and human health, in order to contribute to sustainable development.
- The EDF is administered by Environment Canada. It was created in 1995 to provide a mechanism for directing funds received as a result of fines, court orders, and voluntary payments to priority projects that will benefit our natural environment. Since 2014, all fines paid as a result CEPA, 1999, offences are directed to the EDF.
- The Environmental Offenders Registry contains information on convictions of corporations, of offences committed under certain federal environmental legislation. The registry contains convictions recorded for offences committed since June 18, 2009—when the Environmental Enforcement Act received Royal Assent.

#### **Associated Links**

- [CEPA Environmental Registry](#)
- [Environmental Damages Fund](#)
- [Environmental Offenders Registry](#)

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### ***GOVERNMENT OF CANADA ANNOUNCES NEW PROJECTS TO IMPROVE SOUTH-EASTERN GEORGIAN BAY AND LAKE SIMCOE WATERSHEDS***

The Honourable Tony Clement, President of the Treasury Board and Member of Parliament for Parry Sound—Muskoka, on behalf of the Honourable Leona Aglukkaq, Minister of the Environment, Minister of the Canadian Northern Economic Development Agency and Minister for the Arctic Council, was in Parry Sound today to announce \$8 million in funding for 32 environmental projects that will improve the ecosystem health of the Lake Simcoe and South-eastern Georgian Bay watersheds.

Today's announcement marks the second round of funding under the renewed and expanded Lake Simcoe/South-eastern Georgian Bay Clean-up Fund, which aims to restore the ecological health of Lake Simcoe and South-eastern Georgian Bay and improve water quality for the residents and wildlife of the region.



As part of this funding, the Georgian Bay Biosphere Reserve will receive \$191,305 to work with three municipalities over two years to expand monitoring in Georgian Bay and ensure consistency in how nutrients are measured by stakeholders conducting similar monitoring.

### **Quick Facts**

- Economic Action Plan 2012 committed \$29 million over five years to continue to support the Lake Simcoe Clean-up Fund and extend it to include South-eastern Georgian Bay.
- The Lake Simcoe/South-eastern Georgian Bay Clean-Up Fund supports community-based projects that are focused on reducing phosphorous levels, restoring ecosystem health and improving water quality. This Fund builds on the success of the Government's \$30-million investment under the Lake Simcoe Clean-Up Fund and is part of the Government's comprehensive approach to ensure clean water for all Canadians, which includes projects like the clean-up of contaminated sediment in Great Lakes Areas of Concern.
- The Lake Simcoe/Southeastern Georgian Bay Clean-Up Fund supports ongoing work under other Government of Canada initiatives, including the Canada–United States Great Lakes Water Quality Agreement, the Canada–Ontario Agreement on Great Lakes Water Quality and Ecosystem Health, 2014, and the National Conservation Plan.

### **Associated Document**

- [The Government of Canada's Lake Simcoe/South-eastern Georgian Bay Clean-Up Fund](#)

### **Associated Links**

- [Cleaning Up Lake Simcoe and South-eastern Georgian Bay](#)
- [Canada–Ontario Agreement on Great Lakes Water Quality and Ecosystem Health, 2014](#)

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### ***SYDNEY TAR PONDS CLASS-ACTION DISMISSED BY SUPREME COURT***

(Source: HazMat Magazine) Nova Scotia residents who claimed they were exposed to contaminants as a result of the Sydney tar ponds operation have had their class-action lawsuit dismissed by the Supreme Court of Canada.

Previously, appeal court judges agreed with the case's federal and provincial lawyers, who'd argued that there were simply too many differences in the issues affecting the some 400 class-action members.

There were more than 700,000 tonnes of sludge in the tar ponds from a century of steelmaking. It contained cancer-causing chemicals such as polychlorinated biphenyls (PCBs) and polycyclic aromatic hydrocarbons (PAHs).

Federal and provincial governments have allocated some \$400 million for the remediation of the tar ponds and coke ovens site.

The Supreme Court of Canada, keeping with the status-quo, didn't reveal the reasoning behind its decision not to hear the tar ponds class-action. Lawsuits can proceed, of course, on an individual basis.

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### ***CANADIAN ENVIRONMENTAL SUSTAINABILITY INDICATORS – WINTER 2015 UPDATE***

Environment Canada is pleased to announce the update of five indicators and the introduction of four new indicators to the [Canadian Environmental Sustainability Indicators](#) (CESI) website.

**Highlights of the indicators featured in the Winter 2015 update:**

#### **UPDATED INDICATORS**

The [Polybrominated Diphenyl Ethers \(PBDEs\) in Fish and Sediment](#) indicators report on the occurrence of PBDEs concentration above or below Federal Environmental Quality Guidelines in fish tissue and in sediment at the drainage region level and on the PBDE trends in Lake Trout from Lake Ontario.

Levels of PBDEs in fish and sediments continue to be below the Federal Environmental Quality Guidelines for the majority of PBDE subgroups sampled and drainage regions in Canada. For PBDEs in fish tissues, the situation improved in three of the 10 drainage regions sampled. For sediments, improvement was observed in one and deterioration in two of the nine drainage regions sampled.

The [Status of Major Fish Stocks](#) indicator reports the status of the major fish stocks assessed by Fisheries and Oceans Canada.

Of the 155 major fish stocks assessed in 2013, 74 stocks (48%) were classified as "healthy". On the other hand, 16 stocks (10%) were classified as "critical", meaning that the net ability of the stock to regenerate is considered to be at a level that may cause serious harm to the resource. The remaining stocks were classified in the cautious zone (41 stocks) or were of unknown status (24 stocks). Through the short time-series available (2011 to 2013), the proportion of stocks in each zone remained similar.

The [Sustainable Fish Harvest](#) indicator compares harvest rates with established harvest limits and provides a measure of whether resources are managed within ecosystem limits.

Of the 155 major fish stocks assessed in 2013, 151 (97%) were harvested at levels considered to be sustainable while four stocks (3%) were harvested above approved levels. The situation improved since 2011, the first year of the time series, when 16 stocks (10%) were harvested above approved levels.

The [Managing Disposal at Sea](#) indicator tracks the percentage of permitted disposal at sea sites requiring no further management action.

Between 2004 and 2013, the percentage of permitted disposal at sea sites requiring no management action has systematically been above Environment Canada's performance target of 85% of total monitored sites.

The [Habitat Secured for Species at Risk](#) indicator measures the areas of land and shoreline habitat that have been secured through the Habitat Stewardship Program (HSP) for Species at Risk.

As of March 31, 2014, 1836 square kilometers (km<sup>2</sup>) of habitat had been secured in Canada through the Habitat Stewardship Program. The area secured has increased steadily since the program's inception in 2000–2001.

## **NEW INDICATORS**

The [Managing Metal Mining Effluent Quality in Canada](#) indicator tracks the proportions of metal mining effluent tests meeting the regulatory requirements.

Most of the 11 quality parameters being tested demonstrated stable compliance with the authorized limits from 2003 to 2012, the latest year on record. Two quality parameters, acute lethality and total suspended solids, presented significant improvement over that period.

The [Managing Pulp and Paper Effluent Quality in Canada](#) indicator tracks the proportions of pulp and paper effluent tests meeting the regulatory requirements.

Substantial improvement from 1985 to 2012 is reported, as the percentage of effluent samples meeting regulatory requirements reached 98.3%, 99.8% and 99.8% in 2012 for toxicity tests on fish, biochemical oxygen demand, and total suspended solids, respectively, compared to 25%, 68% and 60% in 1985.

The [First Nations Water and Wastewater System Risk](#) indicator provide information on the risk associated with First Nations management of on-reserve systems funded by Aboriginal Affairs and Northern Development Canada (AANDC).

The percentage of low-risk AANDC-funded First Nations water and wastewater systems were evaluated to be 44% and 52%, respectively, in 2013–2014, up from 27% and 34% measured during the National Assessment completed in 2011.

The [Population Status of Canada's Migratory Birds](#) indicator monitors the populations of migratory birds species against population objectives.

As of 2013, of the 368 migratory bird species populations with adequate monitoring data, 57% (208 species) have population sizes within acceptable bounds and 43% (160) do not.

#### **About the Canadian Environmental Sustainability Indicators**

Environment Canada's CESI program provides objective and comprehensive information on environmental trends in a straightforward and transparent manner. CESI also informs on the progress of the [Federal Sustainable Development Strategy](#) which outlines the Government of Canada's environmental commitments.

Environment Canada prepares these indicators with the support of other federal government departments, as well as provincial and territorial government departments. CESI tracks environmental results for nature, water, air and climate issues. Updates occur as individual indicator data become available, so check out the [CESI site](#) regularly.

If you have any question or comments, please contact us at [indicateurs-indicators@ec.gc.ca](mailto:indicateurs-indicators@ec.gc.ca) and we will get back to you.

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### ***EPA AND DOE TO RESOLVE HANFORD HAZARDOUS WASTE VIOLATIONS***

(Seattle, WA – January 28, 2015) The U.S. Environmental Protection Agency (EPA) and the U.S. Department of Energy (US DOE) have resolved alleged violations of hazardous waste requirements at the Hanford Site near Richland, Washington.

By ensuring that hazardous waste management is conducted in accordance with all applicable requirements, EPA helps protect cleanup workers, first responders and the public from unnecessary exposure to hazardous chemicals. This action also protects the environment by ensuring proper cleanup and closure of hazardous waste storage sites.

The Consent Agreement and Final Order, signed by EPA and US DOE today, addresses two independent Resource Conservation and Recovery Act violations, which occurred in 2013.

In the first case, EPA alleged that US DOE moved 136 fifty-five gallon drums of hazardous waste from a permitted area to an unpermitted area, without seeking or obtaining the required permit authorization.

In the second case, US DOE submitted a closure plan (in October, 2013) for eight storage units that lacked all the required information as required under an earlier settlement. The plan did not detail how and when any remaining waste and contamination would be removed and disposed of as the project was completed. US DOE is now working with the Washington Department of Ecology to amend the plan to include the needed closure information.

As part of this agreement, US DOE will pay a \$44,722 penalty.

For more about EPA's RCRA & TSCA enforcement role at the Hanford Reservation: <http://go.usa.gov/eXDF>

For more about EPA's Superfund cleanup role at the Hanford Reservation:  
<http://yosemite.epa.gov/r10/cleanup.nsf/sites/Hanford>

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### ***NEW USGS REPORTS DESCRIBE GROUNDWATER VULNERABILITY TO CONTAMINATION***

One in every five samples of groundwater used as a source for drinking contains at least one contaminant at a level of concern for human health, according to a new U.S. Geological Survey [report](#).

About 115 million people—more than one-third of the nation's population—rely on groundwater for drinking water, and the need for high-quality drinking-water supplies is becoming more urgent as the nation's population grows.

USGS scientists assessed water quality in source (untreated) water from 6600 wells in regionally extensive aquifers that supply most of the groundwater pumped for the nation's drinking water, irrigation, and other uses. The new USGS reports highlight how geology, hydrology, geochemistry, and chemical use affect the concentrations of individual contaminants in groundwater.

“These reports do a great job of pulling together two decades of water-quality data on the basis of principal aquifers, and in particular, identifying the major relations between concentrations of naturally occurring contaminants and geology, hydrology, geochemistry, etc.,” said Bill Alley, Ph.D., NGWA director of science and technology.

Regional summaries of where and why groundwater is vulnerable to contamination now are available for the following aquifers and aquifer systems:

- [Glacial Aquifer System \(northern U.S.\)](#)
- [Western Volcanics \(northwestern U.S. and Hawaii\)](#)
- [Southwest Basin-Fill Aquifers \(southwestern U.S.\)](#)
- [Denver Basin Aquifer System \(Colorado\)](#)
- [High Plains Aquifer System \(central U.S.\)](#)
- [Mississippi Embayment-Texas Coastal Upland Aquifer System and Mississippi River Alluvial Aquifer](#)
- [Aquifers of the Piedmont, Blue-Ridge and Valley and Ridge Regions \(eastern U.S.\)](#)
- [Northern Atlantic Coastal Plain Surficial Aquifer System \(east coast of the U.S.\)](#)
- [Upper Floridan Aquifer and Overlying Surficial Aquifer \(southeastern U.S.\)](#)

These reports and the associated water quality data are available [online](#).

NGWA has developed best suggested practices that address ways to treat some of these contaminants.

The water samples in this study were collected at the wellhead prior to any treatment. They represent the quality of the groundwater resource but not necessarily the quality of drinking water at the tap.

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### ***LARGEST SUPERFUND SETTLEMENT IN HISTORY MEANS CLEANUPS FROM NEW JERSEY TO CALIFORNIA***

If you pollute the environment, you should be responsible for cleaning it up. This basic principle guides EPA’s Superfund [cleanup enforcement program](#).

We just settled our largest environmental contamination case ever, for nearly \$4.4 billion that will help to clean up the communities that were affected.

Here’s some background: Last April, along with the Department of Justice and the United States Attorney’s Office for the Southern District of New York, EPA announced a historic cleanup settlement with Anadarko Petroleum Corporation. Many years ago, one of Anadarko’s subsidiaries, Kerr-McGee, conducted uranium mining and other activities that involved highly toxic chemicals at sites across the nation. These operations left contamination behind, including radioactive uranium waste across the Navajo Nation; radioactive thorium in Chicago and West Chicago, Illinois; creosote (or tar) waste in the Northeast, the Midwest, and the South; and perchlorate contamination in Nevada. All of these substances can be dangerous to people’s health.

Anadarko tried to skirt its responsibility by transferring the business assets responsible for this contamination into a now-defunct and bankrupt company called Tronox. EPA and DOJ vigorously pursued them – and the result was this new settlement. The nearly \$4.4 billion that the company will pay will help to clean up toxic pollution and to turn the contaminated areas back into usable land.

This settlement took effect last week. Here are some ways that its impact will be felt:

- In Manville, N.J., a coal tar wood treatment facility buried creosote in recreational areas. Funds will be used EPA and the state will get funds to clean up the waste left behind.
- Not far away in Camden and Gloucester City, N.J., there’s a residential area where two former gas mantle manufacturing sites used to be. They’ve received cleanup assistance already, and this settlement means that more is on the way.
- Funds are starting to flow to Navajo Nation territory to help clean up drinking water contaminated by radioactive waste from abandoned uranium mines.
- Low income, minority communities in Jacksonville, Florida; West Chicago, Illinois; Columbus, Mississippi; and Navassa, North Carolina are benefiting from the settlement funds to clean up contamination from uranium and thorium, volatile organic compounds, pesticides and PCBs.

Companies that operate in American communities have an obligation to protect nearby residents from harm. That's why we do enforcement — to protect communities and their health. We make sure that responsible parties are held accountable and pay to clean up the pollution they caused.

Learn more about our enforcement cleanup efforts at Superfund sites across the country, some of which include an enforcement component, in the December 2014 [National Geographic Magazine](#).

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## Upcoming Events

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### ***SUBSOIL SALINITY TOOL (SST) VERSION 2.5.3 UPCOMING COURSES***

The Alberta Environment Subsoil Salinity Tool (SST) is a tool which allows the generation of Tier 2 salinity guidelines for chloride. These courses are based on the recently-released Version 2.5.3 which includes an updated software interface and help-file, various updated guidelines, and enhanced ability to divide a site into subareas. The three-day full certification course includes a comprehensive exam on the third day and provides the necessary information and certification to perform and submit SST assessments. Cost for the course is \$997.50 including GST, with a discount for government regulators or exam rewrites. A one-day update course demonstrating the new Version 2.5.3 is also available to those who have successfully obtained an SST certification number through a previous course. The update course does not include an exam, as previous certifications on older versions remain valid. The cost of this update course is \$341.25 including GST, with a discount for government regulators.

#### **Calgary**

Full three-day certification course: April 7-9, 2015

One-day update course: April 21, 2015

Location: TBD

#### **Edmonton**

Full three-day certification course: April 14-16, 2015

One-day update course: April 17, 2015

Location: Sandman Edmonton South, 10111 Ellerslie Road SW

For further information, please email [SSTHelp@eqm.ca](mailto:SSTHelp@eqm.ca) or contact Equilibrium Environmental at 403-286-7706 or visit [www.eqm.ca](http://www.eqm.ca) for future course dates and a copy of the registration forms.

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Experience  
**americana**  
International Environmental Technology Trade Show and Conference

SHARING  
INNOVATION  
20<sup>th</sup>  
anniversary  
March 17-18-19, 2015  
Montreal, Canada

# MARCH 2-4, 2015

WESTMINSTER, CO



**REMTEC**  
REMEDICATION TECHNOLOGY SUMMIT  
THE FUTURE OF REMEDIATION TECHNOLOGY

PRESENTED BY

Georgia  
Tech

A **bnp** EVENT

[www.remtecsummit.com](http://www.remtecsummit.com)

The RemTEC Summit draws leaders and key stakeholders from academia, government, regulatory community as well as site owners, private consulting agencies and various other environmental professionals.

The RemTEC Summit delivers a truly unique platform focused on advancing the environmental science and remediation industry. It is the place where you can hear essential sources of information on technology, application and policy affecting contaminated site restoration field from the world's leading experts within the academic, regulatory and environmental-consulting communities.

**ESAA Members** and Subscribers receive a 15% discount on RemTEC Summit registration. Use the code "**ESAAvip**" when [registering online](#) as an ATTENDEE to redeem the 15% off discount.

For complete information visit: <http://www.remtecsummit.com/>

### ***WASTE MANAGEMENT & DIVERSION PANEL DISCUSSION***

*Waste Management & Diversion* panel discussion and networking lunch that the BCN is co-organizing for Feb 5. Please help circulate and advertise to your colleagues. For more information visit:

<https://www.eventbrite.ca/e/waste-management-and-diversion-panel-discussion-and-networking-lunch-tickets-15280924657>

### **OIL AND GAS TRADE MISSION TO THE MEXICAN PETROLEUM CONGRESS GUADALAJARA, JALISCO, MEXICO June 10 - 13, 2015**

The 10<sup>th</sup> Annual Mexican Petroleum Congress – the largest show of its kind in Mexico – will be held at Expo Guadalajara in Guadalajara, Jalisco, México from June 10-13, 2015. Organizers are expecting more than 6,000 attendees and approximately 700 international and national exhibitors.

The congress includes technical presentations, conferences and a trade show, as well as cultural, social and sporting activities.

Mission participants can also take advantage of a personalized match-making program organized by a mission consultant.

#### **Opportunities in Mexico**

- Mexico is one of the 10 largest oil producers in the world, and is the second largest economy in Latin America. Mexico is Canada's fifth largest export destination and Alberta's fourth largest.
- On December 20, 2013, the Energy Reform was published in the Official Gazette, becoming the most important step for Mexico towards an efficient and more competitive energy industry. Secondary legislation on energy

reform has recently been passed, opening up the sector to much-needed private investment that will help increase PEMEX's production and refining capacity.

- Mexico's first round of oil and gas licensing starts in early 2015. The government hopes the 169 exploration and production (E&P) blocks on offer will attract around US \$12.5bn worth of investment from international oil companies. With rounds 2, 3 and 4 expected to follow in 2016, 2017 and 2018, each bringing in similar amounts, a total of around US \$50bn worth in energy-related inward investment is expected during the current administration.
- The relationship between Mexico and Canada has continued to grow since the establishment of diplomatic relations in 1944. Our trade and investment relationship has seen strong growth since the entry into force of the North America Free Trade Agreement (NAFTA) in 1994. Today, with increasing bilateral trade and investment, Canada and Mexico have become important strategic partners.
- The Canadian supply chain for oil and gas equipment and services will benefit as production increases for Mexico. Numerous Canadian companies have been active in Mexico's energy sector for a number of years. Canadian companies and research institutes are well regarded in Mexico for their expertise in onshore equipment, services and technologies.
- Mexico is an investment grade country supported by a stable macroeconomic environment. The country has developed an improving business climate.
- Emerging opportunities in the sector include: drilling and exploration equipment, pipeline construction, enhanced oil recovery, heavy oil production technologies, coal bed methane extraction gas exploration and development, electricity generation and transmission and environmental protection.
- The fact that 48% of Mexican crude is 16 API or heavier, and Mexico possesses the world's 4th largest shale gas reserves, makes Mexico a prime oil and gas market for Canadian oil and gas companies.

### **Join the Trade Mission**

The Government of Alberta, in conjunction with Export Development Canada (EDC) and the Department of Foreign Affairs, Trade and Development Canada (DFATD), is organizing a trade mission to the Congress and a "Canada" pavilion at the Trade Show. Mission participation includes exclusive use of the pavilion and one-on-one match-making for companies interested in pre-arranged meetings with Mexican O&G service companies and other key players.

### **The Congress**

Guadalajara, Jalisco has been chosen as the venue for the 2015 Mexican Petroleum Congress. You may visit the Congress website here: <http://www.congresomexicanodelpetroleo.com.mx/home.html>. This year the Mexican Association of Exploration Geophysics (AMGE) will be overseeing the coordination of this significant event in cooperation with major associations in the Mexican petroleum industry such as: the Association of Petroleum Engineers of Mexico (AIPM), the College of Petroleum Engineers of Mexico (CIPM), the Society of Petroleum Engineers (SPE: Mexican Section) and the Mexican Association of Petroleum Geologists (AMGP).

The CMP is Mexico and Latin-America's most important forum for scientific and technological exchange associated with oil and gas exploration and production. This major event gathers the most important representatives of the petroleum industry, and gives them the opportunity to debate trend topics as well as current and future strategies. The Congress includes a trade show, conferences, lunch-conferences and plenary sessions. In additions, the CMP allows attendants and companions to enjoy cultural, sports and social activities in a friendly environment.

PEMEX and Mexican service companies have indicated their interest in joint ventures with Canadian E&P companies for contracts as per the new energy reform. They have also noted a need for specific services and equipment such as: seismic, drilling (conventional & unconventional); well service technologies (i.e., solid controls, fracturing stimulation, pressure services, etc.); artificial lifting equipment and Enhanced Oil Recovery technologies, among others. PEMEX has also started producing from its first shale gas well, and this could be a new area of opportunity.

### **Who Should Participate**

We recommend oil and gas equipment and service companies (including environmental companies), as well as exploration and production (E&P) companies, who have proven technologies, turnkey solutions, and services or products participate in the mission. The target audience will be O&G service companies and PEMEX engineers. There is also an excellent opportunity to meet and gather contacts from the major O&G service companies operating in Mexico who will be exhibiting at the show.

## How to Express Interest

We are looking for a show of interest from Canadian companies that would like to participate in the mission so that we can develop a complete participation package. **We are conscious of the fact that this mission coincides with the Global Petroleum Show in Calgary and aware of the impact that the current price of oil may have on companies. Therefore, before proceeding with this trade mission, we require commitment to participate from eight (8) companies. The mission may not proceed if this number is not reached.**

For more information, email or contact one of our representatives below.

Aimee Charest  
Sr. Trade & Investment Officer, Latin America  
International and Intergovernmental Relations  
Government of Alberta  
Tel: [\(780\) 644-1129](tel:7806441129)  
Email: [aimee.charest@gov.ab.ca](mailto:aimee.charest@gov.ab.ca)

Benigno Rojas-Moreno  
Sr. Trade Director, Latin America  
International and Intergovernmental Relations  
Government of Alberta  
Tel: [\(780\) 427-0794](tel:7804270794)  
Email: [benigno.rojas-moreno@gov.ab.ca](mailto:benigno.rojas-moreno@gov.ab.ca)

## Industry Positions Openings

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For more information visit ESAA's Job Board under the news section of [www.esaa.org](http://www.esaa.org)

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### Regional Sales Manager

**Term:** Full-Time  
**Application Deadline:** January 31, 2015

**Job title:** Regional Sales Manager  
**Region:** Americas  
**Country :** Canada  
**Sector:** Environmental  
**Location:** Calgary AB, Edmonton AB  
**Hours of work:** 40 hours per week



Testing, calibrating, advising

### Key Responsibilities

#### Primary Purpose:

We are looking for an action oriented, strategic team builder to lead our sales activity and ensure our sales team meets or exceeds its annual sales and margin targets. This position is based out of our Edmonton or Calgary offices and requires travel around Western Canada as needed. The Manager of Sales is responsible for managing the day-to-day activities of the Sales Team as well as maximizing sales and profitability of their own book of business to meet their individual target. Management of sales is through use of the Exova End to End Sales SOP.

#### Principal Duties & Responsibilities:

- Responsible for managing and developing a team of 6+ sales executives as well as achieving a personal and team selling quota.
- Creation of sales plans and strategies



- Manager of Sales will lead their sales team through responsibilities such as but not limited to: recruiting, coaching, training, joint customer visits/calls, utilization of relevant metrics to measure performance, account planning, customer development, developing territory strategy and so forth.
- Attain budgeted quota and sales activity metrics for calls, visits, presentations, quotes, orders & revenue
- Attain budgeted new business goals
- Oversee sales reporting and record keeping
- Develop performance objectives of sales teams and monitor performance & goals on a regular basis; complete annual reviews
- Identify national /network account opportunities and develop a strategy to close the business
- Work with Sales Executives to ensure effective new business development including growth of existing client business
- Organize training sessions, off sites, outings, team lunches, etc. to motivate and inspire the Sales Team
- Work with VP on merger & acquisition activity, planning & pipeline development
- Handle additional special projects assigned by Vice President, as needed
- Other related duties as required

### **Skills, Experience & Qualifications**

- Understanding of current trends in the marketplace
- 10+ years of Sales experience, including 5+ years of Sales Management
- Strong project management, time management, organization skills, people, communication & presentation skills.
- Knowledge of industry and specific detailed knowledge re: region's competitors, clients, and prospects. Take initiative to obtain new or industry knowledge when needed (i.e. attending seminars, reading industry articles)
- Demonstrated ability to close business and to help their sales teams do so. This includes the ability to determine why opened accounts are not closing and to help the sales staff create an appropriate strategy to close.
- Initiative: Demonstrates resourcefulness in problem-solving. Capacity to find resolutions to problems without supervision.
- Follow-up. Demonstrate ability to follow up on leads, projects, staff requests, etc without supervision.
- Organization: Completes projects by due dates. Manage schedule to maximize time in the field w/team members while getting management reports and projects completed. Ability to prioritize projects.
- Detail-Oriented. Includes accuracy of reports and information provided to sales teams or Regional and Executive Management.
- Customer service and relationship building skills
- Ability to build an account base from scratch, without using purchased lists
- Proficient in using Microsoft Office (Outlook, PowerPoint, Word, Excel)
- Ability to create and use formula based spreadsheets in Excel
- Experience using and managing a CRM

### **Additional Information**

Be Exova's next great hire. Apply Now: <https://exova.mua.hrdepartment.com/hr/ats/Posting/view/223>

We thank all those who apply; however only applicants selected for interviews will be contacted.

**Exova is an AA/EEO employer**

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### ***JUNIOR CIVIL OR ENVIRONMENTAL ENGINEER(S)***

**Application Deadline:** January 31, 2015

Adelantar Consulting is based in Edmonton, Alberta and provides environmental engineering and consulting services principally in the field of industrial waste management.



We are regularly awarded interesting and challenging assignments for a wide variety of clients mainly in the industrial sector, to responsibly manage their environmental challenges.

At Adelantar, we promote a fun, supportive, inclusive and flexible team environment, with an emphasis on achieving a healthy work-life balance. We facilitate professional development of all employees through strong mentoring relationships, thorough training and a collaborative work environment.

Opportunities exist for individuals committed to excellence in client service and who are interested in joining a dynamic consulting company.

This posting is for junior civil or environmental engineers. The ideal candidate(s) will develop their knowledge and skill in the niche civil field of containment design. Duties include:

- conceptual and detailed design for containment facilities (lining and capping), surface water management structures and roads;
- developing engineering and construction cost estimates
- tendering, construction supervision, and reporting;
- developing feasibility, siting and planning studies;
- liaising with regulatory authorities and preparing permit application documents; and
- communicating with clients and managing projects.
- Adelantar offers competitive compensation and benefits.

#### **Job Qualifications**

- Exceptional communication skills
- A positive team-oriented attitude
- Exposure to environmental consulting is an asset

Please forward a resume and cover letter to [jobs@adelantar.ca](mailto:jobs@adelantar.ca)

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### ***Senior Civil or Environmental Engineer***

**Application Deadline:** January 31, 2015

Adelantar Consulting is based in Edmonton, Alberta and provides environmental consulting services principally in the field of industrial waste management.



We are regularly awarded interesting and challenging assignments for a wide variety of clients mainly in the industrial sector, to responsibly manage their environmental challenges.

At Adelantar, we promote a fun, supportive, inclusive and flexible team environment, with an emphasis on achieving a healthy work-life balance. We facilitate professional development through strong mentoring relationships, thorough training and a collaborative work environment.

Opportunities exist for an individual committed to excellence in client service and who are interested in joining a dynamic consulting company.

This key position is for a senior civil or environmental engineer with design and construction experience on large-scale earthworks construction projects. The role would include the following:

- Client development and management
- Managing projects to ensure their quality execution on time and budget
- Mentoring junior technical staff
- Managing and administering concurrent construction projects, and providing guidance to full-time field staff
- Providing strategic planning input for company direction
- Liaising and coordinating with regulatory agencies including preparation of application documents

Adelantar offers competitive compensation and benefits and is open to explore various potential employment arrangements with the successful candidate (for example part-time or term contract).

### **Job Qualifications**

- Several years' experience in a responsible role managing people and projects
- Exceptional communication skills
- A positive team-oriented attitude
- Experience in environmental consulting is an asset

Please forward a resume and cover letter to [jobs@adelantar.ca](mailto:jobs@adelantar.ca)

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## ***Senior Construction Manager***

**Application Deadline:** January 31, 2015



Adelantar Consulting is based in Edmonton and provides environmental engineering and consulting services principally in the field of industrial waste management.

We are regularly awarded interesting and challenging assignments for a wide variety of clients mainly in the industrial sector, to responsibly manage their environmental challenges.

At Adelantar, we promote a fun, supportive, inclusive and flexible team environment, with an emphasis on achieving a healthy work-life balance. We facilitate professional development of all employees through strong mentoring relationships, thorough training and a collaborative work environment.

Opportunities exist for individuals committed to excellence in client service and who are interested in joining a dynamic consulting company.

We are looking for senior construction managers with civil or environmental experience who are capable of managing several concurrent field projects. Duties include:

- conducting constructability assessments on detailed designs of containment facilities (lining and capping), surface water management structures and roads;
- aiding in tendering components;
- supervising and administering earthworks and lining construction contracts;
- overseeing material and construction quality assurance / quality control;
- liaising between Client and Design office staff (remote communications);
- chairing and steering on-site project meetings;
- mentoring and training of junior site staff;
- overseeing/enforcing safety protocols for on-site company staff;
- following-up on requests for information; and
- close-out reporting and paperwork.

Adelantar offers competitive compensation and benefits.

### **Job Qualifications**

- Several years' experience in a responsible position overseeing civil or environmental construction
- Exceptional communication skills
- A positive team-oriented attitude
- Field management from a consulting perspective is an asset however all aspects of field experience will be considered

Please forward a resume and cover letter to [jobs@adelantar.ca](mailto:jobs@adelantar.ca)

## **Approval Officer**

**Term:** Full-Time

**Number of Positions:** 2

**Application Deadline:** January 30, 2015

**Job Location:** Red Deer and Lethbridge

The Natural Resources Conservation Board (NRCB) is the authority under the *Agricultural Operation Practices Act* (AOPA) responsible for regulating confined feeding operations and manure management practices in Alberta.

We are currently seeking two experienced professionals to work as Approval Officers based out of our Red Deer and Lethbridge offices. As part of a team of professionals located across Alberta, you will work with operators, municipalities, and industry in Alberta to ensure environmentally sound and socially acceptable siting of confined feeding operations. You will be responsible for reviewing and assessing technical information on the planning, siting and development of confined feeding facilities and the issuance of written decisions. Opportunities may also be available for involvement in other NRCB projects and initiatives as they arise.

Qualified candidates will have as a minimum, a B.Sc. Degree and five years experience in related regulatory or environmental work. Good knowledge of agricultural practices and/or livestock operations is required. Strong communication skills and a proven ability to work well with others to achieve results are essential. Additional related education may be considered in lieu of some experience. The successful candidate will be a member in good standing, or be eligible for membership with a professional body.

Based on experience and qualifications, competitive compensation along with a generous benefits package and a defined contribution pension plan is offered.

Additional information on this position is posted on our website. Interested applicants are asked to submit their resume to the attention of Human Resources by Friday January 30, 2015. We thank all applicants in advance, however, only those selected for an interview will be contacted.

**Application Details:** Natural Resources Conservation Board

4th Floor, 9940 – 106th Street

Edmonton, AB T5K 2N2

Fax: 780-427-0607

Email: [hr@nrcb.ca](mailto:hr@nrcb.ca)

Website: <http://www.nrcb.ca/>

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## **Sustainability Advisor – Sustainable Operations Department**



REGIONAL MUNICIPALITY  
OF **WOOD BUFFALO**

**Term:** Full-Time

**Number of Positions:** 1

**Application Deadline:** January 30, 2015

**Job Location:** Fort McMurray

### **Position Type/ Hours:**

This is a permanent full-time position working thirty-five (35) hours per week within the Sustainable Operations Department.

### **Position Description:**

The Sustainability Advisor is responsible for providing guidance and support in all areas of environmental and related public service management. They set priorities to ensure they are effective and proficient members of the Sustainability Department. Primary responsibilities of this position include:

**Environmental Management:** Provide technical input on proposals and conducts evaluation, implementation and monitoring of the Environmental Management System for Environmental Services. Actively participates or leads strategic

enterprise wide sustainability programs. Incumbent will be instrumental in the tendering, selection and management of consultants and contractors involved in sustainability efforts.

**Research and Implementation:** Researches, evaluates and recommends innovative and leading practices and methods in environmental planning and compliance Participates in the continuous research, development, improvement, and implementation of effective departmental strategies, tools, and guidelines based on the municipality's best practices. Provides input to department business plans, initiatives, and budget to ensure continuous achievement of department goals.

**Departmental Guidance:** Maintains communication with external agencies and departments of the provincial government involved in the Environmental Services Department. Participate in business area cross functional teams and external environmental committees. Produce reports on sustainability activities, initiatives and progress. Promote the organizations sustainability initiatives through presentations internally and externally.

**Qualifications:**

- Degree in Science or Engineering from a recognized university (specializing in Sustainability, Environmental Science, Resources Management is preferred).
- LEED or other related certification is an asset.
- Four (4) years' related experience in an environmental service environment.
- Experience working in a public sector environment with unionized and non-unionized employees considered an asset.
- An equivalent combination of education and work experience may be considered.

You will possess the following:

- Ability to empower people, strong organizational skills, and use of innovative approaches in situations involving rapid change, shifting priorities, and/or simultaneous demands.
- Excellent interpersonal, analytical, and communication skills both verbal and written, as well as a demonstrated ability to assess situations from a business perspective.
- Strong team player with a collaborative style and project management and facilitation skills.
- Proven customer focus with demonstrated ability to build effective relationships with internal customers, external providers, and industry contacts.
- Adherence to administrative directives, policy, and legal requirements with knowledge of multicultural and other diversity and inclusion issues and strategies.
- Proficient in various software applications.
- Ability to use sound, practical judgment using independent decision making skills.
- Valid Alberta Class Five (5) Driver's Licence.

\*May require use of personal or municipal vehicle for business travel purposes.

**Salary:** Competitive Salary

**In addition to the rate of pay, we offer other attractive incentives:**

- excellent training and development opportunities
- an extensive employer paid benefits plan
- an additional annual payment of \$12,480 which represents a cost of living allowance

**Requisition Number:** 004173

**Closing Date:** January 30, 2015 at 11:59 PM

**Posting Type:** Internal & External (Posted: January 16, 2015)

We appreciate the interest of all applicants; however, only those individuals selected for interviews will be contacted.

For more information visit: [www.woodbuffalo.ab.ca](http://www.woodbuffalo.ab.ca)

## **Field Environmental Advisor**

**Position:** Field Environmental Advisor  
**Term:** Full-Time  
**Number of Positions:** 1  
**Application Deadline:** January 31, 2015  
**Job Location:** Edmonton or Calgary



**KEYERA** is one of the largest midstream operators in Canada. We provide essential services for oil and gas producers in western Canada and market related natural gas liquids throughout North America. Our business consists of two integrated business lines: Gathering and Processing, and Liquids Business Units. We have a strong reputation for operating our facilities safely and responsibly, and for giving back to the communities where we live and work.

With a vision to be the North American leader in delivering midstream energy solutions, it is our team of innovative, motivated and talented employees that drives our success. Keyera is currently seeking a **Field Environmental Advisor** to join our Environment & Regulatory team.

**Location:** This position may either be based out of Calgary or Edmonton and will require regular travel to our field locations primarily in the Whitecourt/Valley View region of Alberta.

### **THE POSITION:**

As a member of the Environment team within the Environment and Regulatory Department, the successful candidate will be responsible for field-level implementation of the company's environmental management program for the assigned gas processing and transmission assets.

Key activities include: coordination, cost control and monitoring of environmental and associated operational activities and managing environmental consultants to ensure compliance with all current environmental regulations and company standards.

Developing a strong working relationship with Keyera's safety, regulatory, community relations, quality assurance, training and engineering teams is essential.

With the support of the Environment team, other responsibilities and activities include:

- Participate with facility management teams in various routine and project capacities
- Act as the environmental representative to business unit regulatory applications/licensing, construction project teams and due diligence activities
- Annual business unit environmental program budgeting, scheduling and quality control
- Participate on regional industrial association committee(s)
- Contribute to multi-year, multi-site liability management initiatives
- Ensure compliance with AER Approvals, monthly & annual monitoring and reporting
- Provide technical assistance to Environment team, ideally related to company-wide well site reclamation strategy
- Environmental incident response, reports, reviews and follow-up actions
- Emergency Response Plan environmental support

### **QUALIFICATIONS:**

- Environmental Science Degree, with preference for remediation/reclamation disciplines or alternatively, other combinations of education and experience will also be considered
- Five years of applicable oil & gas industry facility, well site or pipeline experience
- Computer aptitude and capacity to multi-task and coordinate field & corporate groups
- Ability to work with plant operations and maintenance personnel is a necessity
- Skills in work planning, safety procedures and business practices
- Strong communication (oral and written), interpersonal and organization skills
- Willingness to undertake frequent travel within Alberta to various field sites

If you are interested in an opportunity to join a winning culture that fosters innovative thinking, open communication, integrity and mutual respect then please submit your resume to: [careers@keyera.com](mailto:careers@keyera.com) by **January 31, 2015**

We thank all applicants for their interest, however, only those considered for an interview will be contacted.

## ***Manager – Environment***

**Term:** Full-Time

**Number of Positions:** 1

**Application Deadline:** February 13, 2015

**Job Location:** Calgary

### **Key Responsibilities**

- Manage the day-to-day operations for WSP's environment group in the Calgary region
- Lead WSP Alberta's oil and gas sector for environmental services including the identification and acquisition of work, and coordination and oversight of client activity
- Provide thought leadership in environmental services required by the sector
- Work closely with the Discipline Leads and Management Team
- Provide technical and logistical support to field personnel for field-based projects
- Review environmental site assessment, remediation & reclamation work plans, project cost estimates and technical reports
- Liaison with clients, regulatory agencies, other WSP business units and stakeholders regarding work plans, projects and environmental issues
- Manage the overall performance and professional development of staff
- Attract and retain key talent by creating an effective work environment and actively recruiting, coaching, and mentoring staff
- Create succession and development plans for key staff
- Implement corporate and client safety programs
- Understand, live and nurture our values

### **Qualifications**

- Strong leadership and motivational skills with the ability to develop positive working relationships in a team environment
- University degree in environmental science, engineering or related discipline
- 15 years of relevant upstream oil and gas environmental consulting experience
- Member in good standing with an applicable professional association
- Proven success in client relationship management at all levels of the client organization
- Proven success in people development and growth
- Thorough understanding of Alberta remediation and reclamation guidelines
- Excellent written, technical reporting and communication skills
- Proficient with Microsoft Office Suite and the use of online system
- Valid and fully licensed driver in Alberta
- The desire to succeed in a dynamic and progressive global organization

To apply for this position please refer to the WSP website at <http://mycareer-canada.wspgroup.com/>, job posting 27-0550

**WSP is committed to the principles of employment equity. Only the candidates selected will be contacted.**

**Application Details:** To apply for this position please refer to the WSP website at <http://mycareer-canada.wspgroup.com/>, [job posting 27-0550](#) WSP is committed to the principles of employment equity. Only the candidates selected will be contacted.

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## ***Environmental Planner, Senior***

**Term:** Full-Time

**Application Deadline:** February 16, 2015

**Job Location:** Calgary, Alberta

### **Key Responsibilities**

- Provides environmental and regulatory knowledge to development, acquisition and construction project teams throughout all pipeline and energy project phases including prospecting, proposal, definition, and implementation
- Provides direction to external contractors, junior and intermediate planners and business partners to ensure overall corporate and project objectives are met

- Represents company projects to regulators, industry groups, environmental groups, landowners, Aboriginal peoples and the public
- Champions HS&E Commitment and underlying principles throughout the organization
- Collaborates with key internal groups responsible for land, community relations, Aboriginal relations, regulatory, legal, and safety to identify and resolve issues, execute project execution plans and schedules, and support the integration of environment appropriately into project planning
- Develops strategies for obtaining environmental regulatory authorization and for responding to public, regulatory and legislative scrutiny of project environmental issues
- Provides project management for permitting and compliance work to projects, including strategies, execution plans, budgeting and scheduling
- Develops and leads regional contracting strategies and maintains strong working relationships with key consultants
- Lobbies to influence regulatory initiatives and industry standards
- Develops and implements negotiating strategies to influence the decisions of external organizations
- Maintains overview of broad project objectives and direction and reassesses and charts new courses as necessary
- Recruits and manages consultants; prepares Request for Proposals and evaluates bids; negotiates consultants' work scope, budget and schedule; provides ongoing management of consultant's work
- Makes presentations at meetings/conferences and prepares written correspondence
- Identifies and resolves environmental legal or process issues (e.g. environmental legal challenges.)
- Manages numerous complex projects simultaneously with tight and conflicting deadlines

#### Qualifications

- Comprehensive knowledge of environmental laws/regulations practices pertaining to pipeline development and other energy project development
- Previous experience solving complex and unique regulatory, permitting and compliance issues on major projects
- Expertise in developing/implementing influence strategies with respect to environmental regulatory initiatives
- Commitment to client service and support
- Minimum 5-8 years' experience in managing environmental planning and permitting for pipelines and other energy projects, including routing/siting, environmental planning, project management, permitting and environmental compliance
- Experience working with Aboriginal communities and non-governmental organizations
- Bachelor's Degree, or preferably Master's Degree, in environmental sciences, geography, public policy or related fields

To apply for this position please refer to the WSP website at <http://mycareer-canada.wspgroup.com/>, job posting 27-0615

**WSP is committed to the principles of employment equity. Only the candidates selected will be contacted.**

**Application Details:** To apply for this position please refer to the WSP website at <http://mycareer-canada.wspgroup.com/>, [job posting 27-0615WSP](#) is committed to the principles of employment equity. Only the candidates selected will be contacted.

### ***Intermediate Hydrogeologist***



**Term:** Full-Time

**Number of Positions:** 1

**Application Deadline:** January 31, 2015

**Job Location:** Edmonton or Calgary

Summit Environmental Consultants Inc. is seeking an **Intermediate Hydrogeologist** to join our Water Resources team in either our **Edmonton or Calgary** offices.

Summit is engaged in challenging and interesting projects across western and northern Canada. We provide a culture of fluid collaboration across disciplines and offices, and place a strong emphasis on career development and mentoring. In addition to a competitive benefits package, pension contributions are matched by the company, and we offer a flexible work environment.

#### **Summit Environmental Consultants Inc.**

An employee-owned company, and a member of the Associated Engineering Group of companies, Summit provides a range of consulting services in water resources management, environmental assessment and planning, environmental management, and information management/GIS. Client sectors include transportation, hydropower, First Nations, urban



infrastructure, mining, and oil and gas. In addition to Calgary and Edmonton, we have offices in Vancouver, Vernon, Saskatoon, Regina, Whitehorse and Yellowknife.

## Position

The successful candidate will work with a dynamic team on a variety of assignments relating to mining groundwater supply, dewatering, wastewater and stormwater management, solid waste management, water resources management, and contaminated sites assessment. This is a key role within the company, with opportunity to grow as a professional and project manager. Reporting to the Regional Manager in Edmonton or Calgary the successful candidate will be a motivated individual who thrives in working in a team environment on a variety of interesting and challenging projects. Some travel is required for this position. Responsibilities include the following:

Plan and carry out field investigations related to:

Dewatering  
Mining development and reclamation  
Groundwater supply well development  
Well pumping tests  
Groundwater modeling  
Groundwater management and protection  
Groundwater quality monitoring

Provide technical expertise to hydrogeology and related projects;  
Manage projects;  
Prepare project reports, technical memos, and letters;  
Assist in preparing proposals;  
Contribute to business development activities; and  
Client liaison and support.

## Requirements

Critical attributes for this role include a high level of technical skill, a drive to pursue new and interesting projects, and a genuine desire to support the development of other professionals. In addition to experience in the roles noted above, candidates should specifically have the following qualifications:

Bachelor's degree in hydrogeology (or a closely related field with advanced coursework in hydrogeology);  
Experience working closely with drilling contractors and other related industrial service providers;  
Minimum 4 years' post-graduation experience in consulting;  
Minimum of 2 years' of hydrogeologic work experience within the Province of Alberta  
Professional registration (P.Geo., P.Ag., P.Eng.) or eligible to be registered within one year;  
Knowledge of groundwater-related Alberta and Canadian regulations;  
Field experience, with an awareness of safe work procedures and hazard assessments – formal safety training is an asset;  
Experience working in remote areas, and in extreme environments and weather conditions.  
Experience operating all-terrain vehicles and snowmobiles is an asset;

Above-average written and verbal communication skills in English;  
Ability to work well under pressure and meet deadlines;  
Excellent organizational skills and attention to detail;  
Ability and desire to work collaboratively, both in a lead and support role, with other environmental and engineering professionals;  
Commitment to working in a team environment;  
Canadian citizen or permanent resident; or otherwise authorized to work in Canada; and  
Project management experience, including effective budgeting and scheduling, leading a team through field investigations, data management and analysis, client communication, and reporting.

## Interested?

If you have the right background and are seeking an opportunity for growth with one of Canada's 50 Best Managed companies, please forward your resume in confidence to Paul Hague at [ph@summit-environmental.com](mailto:ph@summit-environmental.com) No 3rd party placement will be accepted.

**We thank all interested applicants but only successful candidates will be contacted for an interview.**