ENVIRONMENTAL SERVICES ASSOCIATION OF ALBERTA

ESAA Weekly News

An Information Service for Alberta's Environment Industry — *The Week Ending February 10th, 2017*

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The ESAA Weekly News is published weekly by:

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

Comments & submissions are welcome!

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

WaterTech 2017 – Draft Program Available

April 3-5, 2017
Fairmont Banff Springs, Banff

ESAA is pleased to announce that the draft program for the 10th Annual *WaterTech* Symposium. ***WaterTech 2017*** is now available online: http://www.esaa.org/watertech/agenda/.

The 2017 program includes 42 presentations that include:

- Eight (8) technical sessions focusing on *Groundwater vs. Surface Water, Managing Risk, Urban Development, Regulatory, Water Wells, Analytical, Groundwater Contaminants, Mapping and Modelling.*
- *Two (2) special sessions: PTAC Session - Technical Presentation from the Petroleum Technology Alliance Canada and Business 101 (Presentation around risk management, insurance, corporate theft, mergers & acquisitions)*

WaterTech 2017 will also feature three keynote presentations:

- **Opening Keynote:** *Troubled Water,* Sandra Postel, Director and Founder of the Global Water Policy Project
- **Tuesday Lunch Keynote:** *Burrowing Owl Conservation Project*, Tatiana Hayek, Conservation Research Associate, Calgary Zoo
- **Wednesday Lunch Keynote:** *Autopsy of America - A Look at the Abandoned Parts of America*, Seph Lawless, Photojournalist

Registration Information: Early bird registration is now open with special delegate rates available for Members and Non-Members until February 28th, 2017. Rates starts as low as $595 (members) and $695 (non-members) and then increase to $695 (members) and $795 (non-members) after February 28th. Registration details available at: www.esaa.org/watertech/

Sponsorship and Exhibitor Information: Sponsorship and exhibitor information is now available. For additional information contact: lorrine@tl2.ca.

Thank you in advance for your support of *WaterTech.*

REPORT CALLS FOR TIME LIMITS ON INACTIVE OIL AND GAS WELLS IN ALBERTA

(Source: Calgary Herald) Concerns on the growing liability of idle oil and gas wells in Alberta has a researcher at the University of Calgary calling for limits on how long companies can wait to reclaim them.

A report Wednesday by Lucija Muehlenbachs at the university's School of Public Policy says that most of the roughly 80,000 inactive wells in the province likely wouldn't be restarted, even if oil prices or technology significantly improve.

"Looking at what we're seeing in the data of wells moving in and out of activity, it's very rare," Muehlenbachs said.

Oil and gas producers partially close off or suspend wells rather than go ahead with a sometimes costly reclamation because they could be worth producing from again in the future.

But Muehlenbachs's research found that even if oil prices were to double, only about 12 per cent of oil wells would be reactivated. And if a technology breakthrough were to increase reserves five-fold, only about 10 per cent of oil wells and six per cent of gas wells would likely be restarted.

The report finds that most wells aren't fully reclaimed to avoid the cost of doing so, and with no time limit on how long they can remain on standby, there's a risk that companies might not be around in the future to pay for those liabilities.

"This is an accumulation of liability," said Muehlenbachs. "If they're allowed to leave them inactive, then why not just leave them inactive forever?"

The orphan well fund, which manages wells where the owner has gone bankrupt or can't be found, has already gone from 162 wells waiting to be formally abandoned in early 2015 to 1,590 as of Wednesday.

Many other jurisdictions also don't have limits on formally abandoning and reclaiming a well, but about a third of American states have a limit ranging from six to 300 months with possible extensions, Muehlenbachs noted.

Gary Leach, president of the Explorers and Producers Association of Canada, said just looking at the raw data on inactive wells doesn't give the full story. Some wells aren't reclaimed because they're in a producing field, or companies may use them to hold rights on productive formations.

Leach said companies pay taxes on those wells, and they're still closely regulated, so it should be up to producers to decide when they want to close them off permanently.

"As long as we have a robust regulatory framework that keeps suspended wells in a safe state, ultimately it should be up to the parties that invested in that well to make the decision," he said.

Brad Herald at the Canadian Association of Petroleum Producers said industry could be open to some kind of time limit on inactive wells, but it depends on the details.

“It’s in everybody’s interest to see the numbers come down,” he said. “How you do that is the critical piece.”

Herald said industry’s found it can reclaim wells much more efficiently if done in blocks, so it might not make as much sense to set hard deadlines for particular wells.

Wells more than ten years old also see their risk rating go from low to medium, increasing costs and the incentive to decommission them, he added.

Mark Salkeld, president of the Petroleum Services Association of Canada, said he supports clearing the backlog of older wells, especially if it puts his members to work.

“There’s producers where they’re just paying for the licensing fee every year, kind of kicking the can down the road, and I would like to prevent that, or at least address that,” he said.

RESEARCHER SAYS ALBERTA UNDERESTIMATING THE IMPACT OF OIL SPILLS

(Source: Global News) EDMONTON – A researcher says the agency that monitors Alberta’s energy industry has underestimated the impact of tens of thousands of spills going back decades.

Kevin Timoney, an Edmonton-area consulting biologist, used sophisticated statistical analysis, an extensive research review and comparisons with other jurisdictions to conclude the Alberta Energy Regulator doesn’t have a good handle on how much oil and saline water has been released into the environment or remains there.

“Their spill volumes and recovery volumes are too good to be true,” said Timoney, who did the study on behalf of northern indigenous bands concerned about spills on their land.

Timoney began with an AER database, originally obtained by Global News in 2013, of 23,655 oil spills and 14,833 primary spills of saline water reported between 1975 and February 2013. The database included records of how much oil or water was spilled and recovered.

Timoney found that the regulator considered 100 per cent of the oil was recovered in 53 per cent of the oil spills. The median recovery rate for oil was 100 per cent and for saline water 80 per cent.

“Thousands of spills reporting essentially perfect oil recovery raise questions of data validity,” he writes in a report which was to be released Thursday.

The regulator listed two types of spill environments: air-land or muskeg-stagnant water. Timoney found that recovery efficiency was reported to be the same for both. Nor was it significantly affected by the size of the spill.

Timoney turned to previous academic spills research. In eight major studies – five on land and three in water – the median recovery rate was 43 per cent. None documented a perfect recovery.

He then looked at other jurisdictions.

North Dakota, one of the few places where data was available, said only 3.4 per cent of its spill recoveries were 100 per cent successful.

A graph of U.S. oil-spill volumes revealed a smooth, even curve while Alberta’s graph looks like a staircase. That suggests, Timoney writes, “a large proportion of Alberta spill volumes are estimates of convenience rather than measured volumes.”

Tracie Moore, a spokeswoman for the regulator, said the database was never meant to provide a complete picture of spill cleanup. She pointed out that before 2014, the regulator shared cleanup responsibilities with others such as Alberta Environment.

“The remaining volume from the release may have been cleaned up through other means and under the jurisdiction of other entities,” she wrote in an email.

Statistical clues

Timoney also subjected the spill and recovery data to a Benford analysis, a statistical tool that exposes anomalies in large data sets. It has been used in everything from forensic accounting to biology and is accepted as evidence in some U.S. courts.

The AER recovery data was off for both oil and saline water, Timoney found. Given the size of the data set, Timoney concluded the chances of the AER numbers representing actual measured values were vanishingly small.

“If a tax auditor looked at this, there’d be people knocking on doors the next day.”

Moore said the regulator relies on industry to accurately report volumes released and recovered.

“This information may then be verified by AER experts,” she wrote.

Timoney suggests numbers in the AER’s database are the result of managerial decisions and not in-field reporting. That could mean spill and recovery volumes have been underestimated for decades, he said.

“We don’t know how much is spilled and we don’t know how much is left in the environment.”

The AER database says that habitat was damaged in less than one per cent of all spills. In contrast, a study of oil and saline releases in Oklahoma from 1993 to 2003 found damage to surface water, crops or livestock, soil, fish or wildlife in about one-third of 17,000 cases.

Again, Moore noted, monitoring habitat damage may have fallen out of the pre-2014 regulator’s purview.

“Now that AER has jurisdiction over the entire life cycle of oil, gas, coal and oilsands, we have a better understanding of the impact of incidents on the environment.”

Lingering impacts from spills are common on the Alberta landscape, Timoney said, even on sites that are considered remediated. Effects can persist in residual soil contamination and non-natural plant communities.

He believes his investigation raises major concerns in how the regulator monitors an industry with a footprint in Alberta of 12,000 square kilometres.

“We have an environmental risk that is pervasive across the province and it’s unassessed,” Timoney said.

“It’s a major liability not only for the present, but if we ever try to fix things, for the future as well.”

DATA SHOWS FRACKING CAUSED EARTHQUAKES NEAR FOX CREEK: U OF A RESEARCHER

(Source: Global News) Hydraulic fracturing, more commonly known as “fracking,” is a process done by oil and gas companies to liberate gases trapped in rock. They inject water, sand and some chemicals into the ground through high pressure. The pressure increases fractures in rocks, causing the gas to emerge and be piped out.

The process has been blamed for contaminating drinking water and, in some cases, causing earthquakes.

Ruijia Wang, the lead author of the study, said before 2013, the Fox Creek area was quiet for seismic activity.

“Since 2016, Alberta has experienced a number of earthquakes with the magnitude close to 4.0. That brings both media attention and scientific interest, and since there is an increase in the seismic rate it makes us wonder why and how they are happening,” she told 630 CHED.

In January 2016, the community experienced a 4.93 magnitude quake, the strongest recorded in Alberta in the last decade.

Wang said the connection between fracking and earthquakes is based on the spatial and temporal relationship between the two.

“Analyzing the earthquake data, we find that the earthquakes are actually taking place at a depth very close to the hydraulic fracturing depth. And the time frame are very close with each other, so this is how we find the potential relationship between them.”

The PhD candidate is hoping her research will help to better understand the correlation between earthquakes and industrial activities involving fluid injection or extraction.

In Canada, fracking is associated with earthquakes — but in the United States, quakes are predominantly caused by wastewater disposal.

“Understanding why and how the earthquakes are induced in our area will help us to explain and answer many lingering questions why America is different from Canada.”

Wang said the study used regional seismic reporting to analyze the source of mechanisms of earthquakes near Fox Creek in 2016, induced by hydraulic fracturing.

The study was done in conjunction with the Alberta Geological Survey.

$1 BILLION LAWSUIT FOR CONTAMINATION FROM LOVE CANAL

(Source: HazMat Magazine) The Town of Wheatfield, New York, just east of Niagara Falls, is being sued by current and former residents who claim that contaminants from the old Niagara Sanitation landfill impact their adjacent properties.

There are 16 notices of claim that make up the lawsuit and more are expected. Each notice is for $60 million in damages. According to the filing notice, the plaintiffs have 15 months to file a formal lawsuit.

The claim made by the plaintiffs, all current or former residents of Forbes Street in North Tonawanda, claim that their poor health is a result of chemicals migrating from the old Niagara Sanitation Landfill in the Town of Wheatfield. The residents claim that they are experiencing headaches, nausea, respiratory issues and nervous system disorders

The site has been reclassified in recent years by the NYDEC to a Class 2 site on the New York State Registry of Inactive Hazardous Waste Sites. The reclassification of the site by the NYDEC was due to recently characterized elevated surface soil concentrations identified in several locations and the presence of hazardous waste in the subsurface.

In a December 21st 2015 Public Notice, the NYDEC stated “The landfill does not have a Part 360 cap or access restrictions. Both conditions indicate a concern for potential exposures to people who enter the site. This exposure concern has been documented as people are using the landfill as a jogging and play area. Dirt bike trails are evident throughout the site and use of such has resulted in landfill materials to become exposed at the surface. Therefore, the site represents a significant threat to the environment and public health.”

According to a March 2016 *Information Update* by the New York Department of Environmental Conservation (NYDEC), there is not off-site migration of contaminants. The March 2016 *Information Update* states “Surface water is confined to the landfill in ponded areas and does not run off the site. No significant off-site contamination is anticipated due to a naturally existing clay layer beneath and around the landfill which limits the migration of contaminants from the landfill.”

The old Niagara Sanitation Landfill is a former municipal and industrial landfill that accepted waste from multiple sites, including Niagara Falls Air Force Base, Bell Aerospace, Carborundum, Frontier Chemical, Graphite Specialties, Continental Can, and Grief Brothers. Contaminants at the landfill site include metals, polycyclic aromatic hydrocarbons, polychlorinated biphenyls, pesticides, caustics, and plating tank sludge.

The old Niagara Sanitation Landfill operated from the 1950's to 1968. The former owner of the site, Niagara Sanitation, accepted chemical and industrial waste including material from the infamous Love Canal which is only 10 km (6 miles) west.

Love Canal is characterized on the US EPA website as one of the most appalling environmental tragedies in American history. An abandoned canal was used as a hazardous waste disposal site starting in the 1920's until the early 1950's by the Hooker Chemical Company. In 1978 the dump literally exploded.

The Love Canal waste that had been deposited in the old Niagara Sanitation Landfill was removed in 2014 and 2015. It was to be transported to the hazardous waste incinerator in Sarnia, Ontario for destruction but political outcry in Canada resulted in it being transported by rail to the hazardous waste incinerator in Kimball, Nebraska.

According to a news article in the Buffalo News, the residents along Forbes Street that are suing the Town of Wheatfield paid for their own private environmental investigation and found that contamination from the landfill had migrated onto their properties.

The Town of Wheatfield is currently in the process of fencing off the 20.8-acres landfill site and the NYDEC is in the process of continuing its investigation on the extent of contamination at the landfill and preparing a clean-up plan for the site to be completed in 2019.

New ESAA Member

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

Full Member:

Acre Prime Inc
234234 Wrangle Road
Rocky View County, AB T1X 0P5
Phone: (403) 235-2222
Website: www.acreprime.ca

Dustin Rusnack, President
e-mail: dustin@acreprime.ca

Profile:
Acre Prime Inc. is your premier Hydroseeding, land reclamation, excavation, and erosion specialist, providing services throughout Alberta for the last 50 years. As our customers' needs are constantly changing, we are continuously updating and increasing our equipment inventory and services provided in order to meet these requirements. Services offered include but are not limited to hydroseeding, drill seeding, excavation, grading, topsoiling, equipment hauling, ECO plans, ESC drawings, reports, implementation, maintenance, and general contracting.

UPCOMING EVENTS

Two Weeks Until the Environmental Gathering!

You still have time to purchase tickets to the 2017 Environmental Gathering and join champions from across Alberta who are standing up for change and success. With an amazing lineup of keynote speakers, as well as over 30 different presentations and workshops from experts and environmental leaders, this is the best opportunity you'll have to connect, learn, and find new breakthroughs in your efforts to protect the environment.

Full program details are available online at the link below. Lucky You! We are also running a social media contest over the next week to give away two free tickets. Join the conversation online with #EcoGather17 and be entered for a chance to attend the Gathering at no cost!

Purchase Your Tickets Now | **Program Overview** | **Win Tickets**

Industry Positions Openings

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

Senior Civil or Environmental Engineer

Adelantar CONSULTING

Term: Full-Time
Number of Positions: 1
Application Deadline: February 20, 2017
Job Start Date: ASAP
Job Location: Edmonton, Alberta

Adelantar Consulting is based in Edmonton and provides civil-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. Services provided include facility siting, containment design and construction management, and regulatory liaison.

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.

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 construction projects, and providing guidance to 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

- Experience in a responsible role managing people and projects
- Experience in landfill or surface water management projects
- Experience in Alberta consulting is an asset (minimum 15 years preferred)
- Exceptional communication skills
- A positive team-oriented attitude

Please forward a resume and cover letter to jobs@adelantar.ca.

ENVIRONMENTAL EXPERIENCED Wetland and Qualified Aquatic Environmental Specialist (QAES) ALBERTA

EARTHMASTER
ENVIRONMENTAL STRATEGIES INC

Term: Full-Time
Number of Positions: 1
Application Deadline: February 28, 2017
Job Start Date: Spring 2017
Job Location: Alberta

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

We are seeking an **Intermediate** Qualified Aquatic Environmental Specialist (QAES) /Wetland Specialist to work in our upstream oil and gas and commercial-industrial environmental programs.

RESPONSIBILITIES:

Develop and manage environmental programs and site specific projects:

- Develop work plans and cost estimates
- Co-ordinate, supervise and execute field work
- Prepare, review and edit technical reports
- Safety reporting and complete commitment to high safety standards
- Provide strong leadership skills and mentor junior staff
- Ensure excellent client service and foster strong working relationships
- Effectively manage project budgets

- Participate in business development

QUALIFICATIONS:

- University degree in a relevant discipline
- Applicable professional designation(s) or eligible for professional designation(s)
- **Minimum 5+** years of field experience working as a QAES/Wetland Specialist
- Experienced in environmental approvals and permitting
- Experience in contaminated site assessment, remediation and/or hydrogeology will be considered an asset
- Strong communication and excellent written and oral (English) skills
- Well-developed interpersonal skills including problem solving, decision making and stress management
- Valid Class 5 driver's license

Application Details: Please forward cover letter and resume to:

Earthmaster Environmental Strategies Inc.
#200, 358 – 58 Avenue SW
Calgary, AB T2H 2M5
Email: earthmasterhr@gmail.com
Fax: (403) 201-2227
Web: www.earthmaster.ca

PUBLIC AGENCY BOARD OPPORTUNITY:
DIRECTOR/CHAIR, ALBERTA RECYCLING MANAGEMENT AUTHORITY

Alberta Environment and Parks, Edmonton. The Minister of Environment and Parks is seeking applications from individuals interested in serving as Chair of the Alberta Recycling Management Authority.

The majority of board meetings are held in Edmonton at the Alberta Recycling Management Authority's head office. There are some exceptions where meetings are held in other locations in Alberta.

The Alberta Recycling Management Authority is a delegated administrative organization that is accountable to the Minister of Environment and Parks.

The Alberta Recycling Management Authority is responsible for managing three of Alberta's five regulated recycling programs for tires, paint (and paint containers), and electronics.

The Alberta Recycling Management Authority collects environmental fees remitted from suppliers on designated materials (tires, electronics, paint) sold in the province. The fees are used by the Alberta Recycling Management Authority to administer the relative recycling programs including administrative costs; operational costs such as the collection, transportation and processing of material; education programs and research and development activities.

The Chair is accountable to the Board of Directors of the Alberta Recycling Management Authority. The Alberta Recycling Management Authority is accountable to the Minister of Environment and Parks.

Position Profile:
Please see the Position Profile for more information on this opportunity and a detailed list of responsibilities:
https://www.alberta.ca/public-agency-opportunity.cfm?appt=369&print&DPP

Contact Information:
Mr. Patrick Kane, Director Waste Policy,
10th floor Oxbridge Place, 9820-106 Street, Edmonton, AB T5K 2J6
email: Patrick.Kane@gov.ab.ca or phone 780.422.2136

Closing Date: February 20, 2017. Job ID #369

https://www.alberta.ca/public-agency-opportunities.cfm