



**SMA**

Saskatchewan  
Mining Association

## 2017 Annual Report



# ***2017 Annual Report***

***(January 1, 2017—December 31, 2017)***

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# **SMA Strategic Plan 2017 - 2021**

## **Goal 1:**

Advance Safety and Environmental Stewardship

## **Goal 2:**

Enhance Public Awareness and Support

## **Goal 3:**

Inform Regulatory and Policy Frameworks

## **Goal 4:**

Cultivate a Diverse, Inclusive and Talented/Skilled Workforce

## **Goal 5:**

Advance Indigenous Participation

## **Goal 6:**

Enhance Capacity and Efficiency of Saskatchewan Mining Supply Chain Sector

## **Goal 7:**

Organizational Effectiveness

### **Mission Statement:**

*Advance a safe, sustainable and globally competitive exploration and mining industry in Saskatchewan that benefits all residents of the province.*

# Chair's Message

Jessica Theriault  
Director, Environmental Affairs, Potash Business Unit,  
The Mosaic Company



2017 marked the first year of the reconfigured governance structure of the SMA Board of Directors (BOD), comprised of 16 engaged Board Members, proportionally representing the 5 sections of the SMA (Potash, Uranium, Metallic, Industrial and Exploration).

At the 2017 Annual General Meeting last year, the SMA Members approved changes to the SMA By-Laws that included the following principal revisions:

- The board structure was modified to eliminate the positions of 2<sup>nd</sup> Vice-President and Past President
- The formation of Governance Committees and elimination of the Executive Committee
- The provision for the formation of a Senior Leaders Roundtable
- The provision for termination of membership under certain circumstances
- Quorum requirements for Meeting of Members and Meeting of Directors
- The term of a Director Terminating if a director ceases to be employed in Saskatchewan
- Change in terminology from President to Chair and from Executive Director to President
- Identification of Officers of the Association as the Chair, Vice-Chair and President
- Formally identifying the Subject Matter Committees (safety, environment, human resources, public awareness, geotech and taxation)

The SMA BOD met five times in 2017, providing oversight to SMA business, meeting with various government officials, monitoring progress on the current SMA Strategic Plan, and executing changes to the governance structure. With both the Provincial SaskParty and NDP calling leadership races for early 2018, and with significant proposals to Federal Legislation related to Environmental Assessments, Indigenous Engagement, Climate Change/Carbon Tax, Species at Risk and the introduction of The Cannabis Act, the SMA BOD was actively engaged at both the Provincial and Federal levels.

Amidst a backdrop of stubbornly low commodity prices, 2017 also marked the start of the SMA's 5 year Strategic Plan (2017 – 2021). The 7 goals and related action items are identified in Appendix 1.

## Board Governance

Board Committees, including Governance & Nominating (G & N), Audit & Finance (A & F), and HR & Compensation (HR & C) continued to meet this year.

- The G & N Committee, chaired by Vice-Chair, Tammy Van Lambalgen, met once this year to develop the Nominating Committee Report for the BOD and provide oversight to the annual general meeting (AGM) preparations.
- The A & F Committee, chaired by Jason Tremblay, met three times this past year to:
  - Meet with the Auditor in advance of the audit as well as post-audit to review the draft financial statements
  - Discuss performance of the Auditor for the purpose of recommending the appointment of auditor for 2018.
  - Provide guidance to the President on development of an Investment Policy
  - Provide guidance to the President in development of a Single Desk Financial Services Proposal, with subsequent recommendation to the Board of the provider. (BMO)
  - Provide guidance to the President on developing a Request for Proposal for a study on the economic benefits of the Saskatchewan mining industry, with subsequent recommendation to the Board
  - Review the draft 2018 budget
- The HR & C Committee, chaired by Alice Wong, met once this past year to develop a committee workplan, and review the performance and compensation process for the President. Meeting topics included succession planning, respectful workplaces and work/life balance.

During the past year, Terry Morris retired from the SMA BOD and was replaced by Tom Shaw. John Sundquist will be completing his term at the AGM. I'd like to recognize and thank both Terry and John for their contributions to the continued success of the SMA. I would also like to express my gratitude to my colleagues on the BOD for your support and the insight you bring to the SMA BOD meetings. It's been a challenging and rewarding year with many active files and more adventures ahead for 2018! Thanks as well to all of the SMA members for your participation on the various SMA Sections and Committees. Together your contributions will ensure that the voice of Saskatchewan's mining sector is heard and leading the way in the development of resulting legislative and policy frameworks.

Finally, I'd like to acknowledge the outstanding work and dedication of the SMA President, Pam Schwann and her team of Brad Sigurdson, Tracey Irwin and Dorian Ward. The Saskatchewan Mining Association is a highly regarded and respected industrial association throughout not only Saskatchewan, but also across Canada. It's the dedication and professionalism of this team to which we owe this success.

# President's Message

Pam Schwann, M. Sc., P.Geo, Pro. Dir.

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From mergers to mine openings, temporary mine suspensions, changes to political leadership and overhauls to federal legislation, 2017 was a transformational year for the Saskatchewan mining industry.

## ***Representing our members...***

The Fraser Institute continued to rank Saskatchewan as the #1 jurisdiction in Canada and the world to conduct exploration and mining operations. The Mining Journal's World Risk Report, echoed that of the 85 global jurisdictions researched, Saskatchewan was the safest place to invest resources capital. The SMA will continue to work diligently to ensure companies have confidence in investing in Saskatchewan and that we retain the competitive advantage of an effective regulatory and policy system. Members can take pride in knowing that their contributions have led to recognition of Saskatchewan as a world-leading mining location.

Continued low commodity prices for Saskatchewan's two primary commodities, potash and uranium and the continued pressure on thermal coal production related to federal climate change policies made for a challenging year. The "merger of equals" between PotashCorp and Agrium transitioned throughout 2017 as the companies worked through the governance, regulatory and internal frameworks for the emerging successor company Nutrien. The unsustainably low price of uranium also resulted in change for Saskatchewan's uranium sector. In November 2017 Cameco announced the difficult decision to temporarily suspend uranium production from the world's highest grade mine, McArthur River and Key Lake mill facility for at least a 10 month period, effective January 2018. Overall, production from the various sectors was mixed in 2017, with another record production in gold achieved at the Seabee Mine, increased potash production, slightly increased coal production but with reduced uranium production and exploration expenditures. Details are included in the respective Section reports.

No new Members joined the SMA in 2017. The level of activity of the mining sector, as reflected by the total hours worked in 2017 by member companies, continued to decrease, from 16.4 million hours in 2016 to 15.4 million hours in 2017. The lost time injury rate for mining remained lower than the provincial average, at 0.34 in 2017, similar to last year. Mosaic Belle Plaine was awarded the National John T. Ryan Award for Safety excellence in Select Mines. In 2017, Mosaic Potash Esterhazy K1 will be receiving the SMA Safety Award for attaining the significant achievement of an injury rating of "0". Our Members are committed to being safety vigilant.

## ***...by what we do***

Throughout the year, SMA Board, Section and Committee members and staff are engaged in activities and strategies that are aligned with and support the SMA's Strategic Plan (2017 – 2021) and it's 7 Goals.

From advocating on behalf of members on issues related to provincial and federal regulatory changes, delivering educational outreach programs and public outreach and membership events, SMA activities are focused on representing and supporting a safe, responsible and growing Saskatchewan mining industry. Activities of the Sections and Committees in 2017 are outlined in the respective reports. Key outcomes of SMA activities in 2017 aligned with the SMA Strategic Plan and Goals are detailed in Appendix I.

Multiple Federal environment files, proposed Provincial Mines Regulations, workplace safety issues related to the of legalization of cannabis, and mineral tenure issues have notably required the attention and sustained focus this past year and will continue to do so in the coming year. The cumulative impact of increased costs from government(s), including continually escalating power costs, are eroding the ability of the exploration and mining sector to be globally competitive. The SMA will be more active in this space to ensure governments are making informed decisions and understand their cumulative impact. On a more positive note, 2018 marks the 50<sup>th</sup> Anniversary of the SMA Emergency Response Mine Rescue Competition. Substantial planning occurred throughout 2017 for this momentous occasion, partly because it will be held for the first time in Moose Jaw – at Mosaic Place- and also because the SMA is undertaking a Legacy Book about the Competition to mark the occasion.

The SMA undertook three significant education outreach ventures in 2017 – the Minerals and Products (MAP) event in La Loche in April 2017; the Mining for Society (M4S)/CIM MEMO in Saskatoon in Sept. 2017 and the STEMFEST in May. These events showcased the mining sector to over 1500 students and 100 educators. Ensuring the next generation of leaders and employees understands the benefits of mining to the global and local society and the necessary ecosystem for a vibrant industry is critically important in an era of increasing social license. We must continue to occupy space in this discussion.

## ***...and how we do it***

Much of the heavy lifting accomplished by the SMA is done through the work of the Subject Matter Expert Committees (Safety, Environment, Human Resources, Geotech, Public Awareness) as detailed in their attached reports, as well as the work of the individual Sections, subcommittees, and various adhoc committees. Collaboration is a key to our success, and we are fortunate that Members willingly share expertise, experience and time.

The SMA continues to support workforce development through our continued sponsorship of SMA Scholarships. Recipients of the Environmental Engineering Scholarships at U of R and U of S were Claire McLellan and Leslie Squire respectively, and the recipient of the Mine Engineering Scholarship at Sask Polytechnic was Dustin Crosson. In 2017 we sponsored the U of S World Mining Competition, the U of S Geological Engineering competing in the Canadian Mining Games, the Ile a la Crosse high school robotics team

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competing in SK Polytechnic's Robotics Challenge, Yorkton Regional High School Robotics Team competing at the World Robotics Championship, and the WIM/WIN "Mine Your Potential". SMA submitted two proposals to the IMII Diversity & Inclusion Challenge related to Indigenization of SMA Lesson Plans and a Youth First Responder Boot Camp to encourage indigenous and female youth to consider mining-related careers. SMA also supported the WIM/WIN Mentorship Application. These 3 projects were approved in late 2017 and we look forward to a busy and productive 2018-19.

Collaborating and coordinating advocacy with provincial/territorial/national mining organizations and local and provincial chambers of commerce leverages our ability to effectively advocate for our members. In addition to collaborating with the Mining Association of Canada (MAC), the Prospectors and Developers Association (PDAC) the Canadian Mineral Industry Federation (CMIF), and CIM, in 2017 the SMA partnered with the Saskatchewan Chamber of Commerce, Saskatchewan Construction Association, and the Agricultural Producers of Saskatchewan in the "Transform Sask" initiative to dialogue with Saskatchewanians about a collective vision to shape the next generation of the province's economic and social prosperity. This blueprint document was presented to the provincial Government.

Recognized by governments, communities and fellow associations for the expertise and value proposition we offer, the SMA is invited to participate on various provincial Boards, and Committees. During 2017 the following individuals represented the SMA on external Councils, Boards and Committees.

- Occupational Health & Safety Council – Mr. Dustin Maksymchuk, The Mosaic Company, Esterhazy K1
- Saskatchewan Apprenticeship and Trade Certification Council - Brian Marshall, The Mosaic Company, Esterhazy K2
- Saskatchewan Polytechnic Board of Directors– Vice Chair; Pam Schwann (retired April /17)
- Commercial Advisory Committee – SAMA – Darwin Collins, The Mosaic Company
- Saskatchewan Labour Relations Board – Steve Seiferling,
- Radiation Health and Safety Committee, Labour Relations & Workplace Safety – Mark Sherwood, Cameco
- Labour Relations and Workplace Safety Minister's Advisory Committee, Lee Knafelc PotashCorp/Nutrien
- IMII Board of Directors – Jessica Theriault, The Mosaic Company
- IMII Education and Training Panel – Pam Schwann
- WIM Trailblazer Selection Committee – Pam Schwann

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### ***Resourcing our activities in alignment with Strategic Plan***

The Association recognizes the sustained financial pressures of our Members. We are committed to providing value and operational excellence to you, including ensuring that SMA activities are aligned with our mandate, that they are efficient and cost-effective for our members and are not duplicative of work being done by other organizations. A significant amount of time was invested in a review of the SMA financial services/banking processes & investment policy and our continuing movement to electronic banking. Special thanks to the Board Audit and Finance Committee for their guidance which will optimize our cash flow and investment income and support efficiencies.

The SMA generates revenue through membership fees and through additional initiatives that are aligned with the SMA Strategic Plan including: the Mining Supply Chain Forum, publication of ORE, Workshops and Professional Development Forums and accessing grants. Revenue-generating initiatives now represent 46% of our annual operating income. The Office Manager position continued to be staffed on a part-time basis in 2017. More companies continue to utilize direct deposits to pay invoices, and we continue to move to on-line credit card payments through venues like Picatic, for workshops and some events to reduce administrative tasks.

### ***Acknowledgements***

The Saskatchewan motto of "*From many peoples' strengths*" is also illustrative of the SMA work ethos. We achieve results by working collectively as opposed to individually; the contributions and strength of our members, combined with leadership of the Board, Committee Chairs and Section and Committee members is at the core of the achievements of our Association. Your continued dedication and diligence in giving generously of your time and talents is greatly appreciated.

The SMA team is comprised of passionate advocates for the exploration and mining industry; Brad Sigurdson (Vice-President Environment, Safety and Regulatory Reform), Tracey Irwin (Manager, Membership and Communication), and Dorian Ward (Office Manager). This summer we were joined by SUNTEP student Alyssa Pelletier, funded by the Canada Jobs Grant. I am very grateful for their talent, diligence and professionalism. I would also like to acknowledge the passing of a dear friend and colleague of "ours", Doug Poole from PotashCorp Allan. Doug was a stalwart safety leader for the Saskatchewan mining industry and exemplified the positive difference one person can make. His legacy continues.

I encourage you to review the SMA Section and Committee Reports as well as Appendix III (2017 audited draft financial statements) and Appendix I (activities related to the 7 Goals in the SMA Strategic Plan). SMA submissions to Governments are available to members by contacting the office.

# Exploration Section

Chair: Scott McHardy, Vice-President, Exploration  
Cameco Corporation

## Summary

Saskatchewan is one of the most attractive jurisdictions for exploration investment and is recognized by the Fraser Institute and the Mining Journal's World Risk Report as being the best, and safest place in the world to invest resource capital. Exploration fulfills the important role of sustaining our mining industry and creating opportunities for new mineral wealth. The explorers of Saskatchewan range from prospectors to junior exploration companies to large international corporations. Table 1 provides the in-ground expenditures for the previous five years.

**Table 1**  
**Saskatchewan Exploration Expenditures (million \$Cdn)**

Commodity	2013	2014	2015	2016	2017*	Change % 2016	5 year Average	10 year Average
Uranium	143.8	138.7	136.1	156.1	132.4	-15%	141.4	134.0
Diamonds	4.2	3.6	17.3	9.2	3.8	-59%	7.6	15.3
Gold	6.3	6.0	2.2	6.2	4.9	-21%	5.1	7.1
Base Metals	7.8	2.9	3.8	0.5	6.4	1180%	4.3	6.3
Potash, Coal, REE, other	74.3	64.6	51.5	26.7	29.4	10%	49.3	109.9
<b>Total</b>	<b>236.4</b>	<b>215.8</b>	<b>210.9</b>	<b>198.7</b>	<b>176.9</b>	<b>-11%</b>	<b>207.7</b>	<b>272.5</b>

\*Saskatchewan Ministry of the Economy

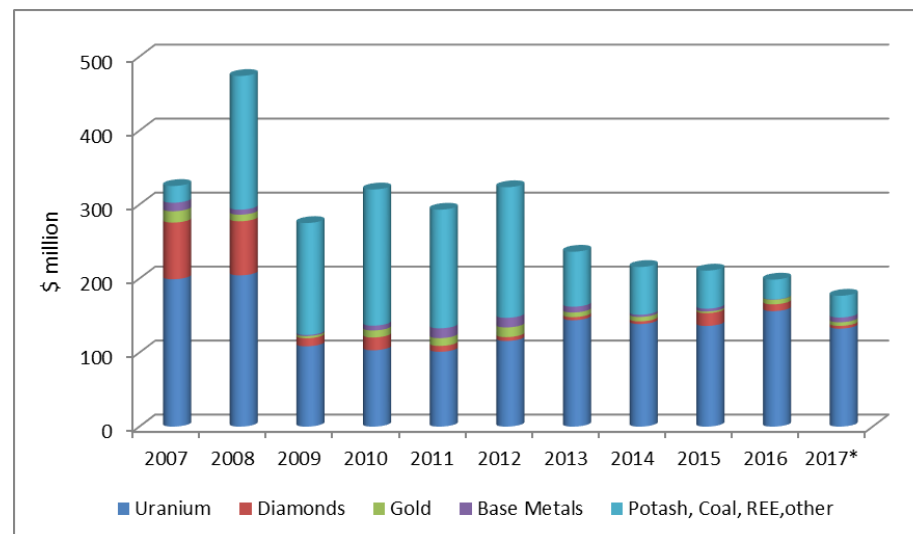
Total estimated 2017 expenditure on mineral exploration in Saskatchewan is \$177 million, a decrease of 11% from 2016. Uranium continues to lead the exploration spending at 75% of the total expenditures, followed by potash at 16%. With the exception of base metals, the level of spending for the remaining commodities are below their respective five and ten year averages.

Exploration fulfills the role of sustaining our existing industry and creates new wealth from new mining opportunities. The total exploration spend is comprised of greenfield (advancing higher risk grassroots prospects for new production opportunities), brownfield (producers replacing reserves, sustaining production) and late stage exploration (continued deposit appraisal expenditures after an initial resource estimate). To ensure a pipeline of

successful projects, exploration is critical for new discoveries to progress through appraisal stages to recognize new mining opportunities that generate new wealth. To ensure a pipeline of new projects, the future of the Saskatchewan mining industry is reliant on exploration.

Exploration spending is one measure of the health of the mining industry as it is subject to commodity prices, capital markets and the financial health of the overall industry. While Saskatchewan benefits from its inherent strength of the multi-commodity portfolio, it is important to note the downward trend in exploration spending since 2012. For reference, Chart 1 illustrates the distribution of exploration expenditures from 2007 to 2017.

**Chart 1 Saskatchewan Exploration Expenditures 2007 to 2017**



The Exploration Section meets quarterly with additional MARS (Mineral Administration Registry Saskatchewan), SMEGAC (Saskatchewan Mineral Exploration Government Advisory Committee) and Safety subcommittee meetings.

## Inform Regulatory and Policy Framework

Activities focused on sustaining Saskatchewan as the destination for exploration investment. In order to maintain a productive exploration ecosystem, access to land and incentivizing exploration continue to be critical in



this challenging environment. A significant amount of time was spent on the Mineral Administration Registry Saskatchewan (MARS), Provincial Sales Tax (PST) on exploration activities, Species at Risk Act (SARA), specifically the Woodland Caribou and the developing of their Habitat Range Plans by the Saskatchewan Ministry of Environment.

Low commodity prices and market challenges continue to impact the ability of explorers to raise financing for exploration investment in an environment of declining investor risk tolerance. Incentive strategies are needed to sustain discovery rates through supporting companies investing in exploration activities. Our membership contributed to these provincial and national concerns through informing and participating on issues of capital raising, flow through financing, and mineral exploration tax credit. Year 2017 saw the implementation of Provincial Sales Tax on exploration activities (drilling and linecutting) that encumbers exploration in the time of discussion of strategies to incentivize exploration.

The Mineral Administration Registry Saskatchewan (MARS) allows for online acquisition and management of mineral dispositions. This system has been in-place for six years and it still needs development to recognize its full potential. While progress continues with the reopening of the backlog of lapsed mineral claims, there are still outstanding concerns to be resolved on fragmented claim ownership and partial cells due to legacy boundaries. A MARS sub-committee comprising of the joint participation of the Exploration Section subcommittee (lead by Craig Cutts, AREVA) and the Lands Branch/ Mineral Tenure of the Ministry of the Economy work to resolve existing concerns.

#### **Advance Safety and Environmental Stewardship**

Many of the land use and environmental issues that confront exploration are the focus of the Saskatchewan Mineral Exploration Government Advisory Committee (SMEGAC), a joint industry – government committee. Scott Frostad (Purepoint Uranium) is SMA co-chair of SMEGAC. This committee meets quarterly to address exploration permitting issues at the operation level and collaborate with government on best practices and industry standards. This committee has the mandate to develop and maintain an efficient, environmentally responsible operating framework for the province's exploration community. Items discussed include updates on the Saskatchewan Environmental code, invasive species (weed control), remediation of abandoned exploration sites and updates to Best Management Practices (Woodland Caribou, Sump Development).

Kelly Hanke of Cameco chairs the Exploration Safety sub-committee. The sub-committee continues to work on its mandate of enhancing its network of exploration safety representatives and to provide a forum to discuss unique,

common, and emerging safety issues relative to the exploration industry. Work continues to promote a culture of safety in the exploration sector through shared experiences and exploring synergies for training resources.

#### **Education Outreach**

Exploration Section member companies assisted with the Minerals and Products (MAP) event held in La Loche. This event reached out to students in grade four and grades seven to twelve. In all, 196 students with 22 teachers participated. The schools involved were the La Loche Community School, Clearwater River Dene Nation School and Northlands College Tri-trades students. The MAP provides a career component of the mining industry woven through six pavilions – Exploration, Mining, Processing, Products, Sustainability and Safety.

#### **Exploration Highlights**

Significant highlights of the SMA Exploration members during the year are presented by commodity. A number of NI 43-101 reports and feasibility studies were undertaken for uranium, gold and potash projects.

#### **Uranium**

All of Canada's uranium production comes from Saskatchewan's Athabasca Basin.

Some of the exploration programs that were successful in expanding uranium resources in 2017 are:

- NexGen's Arrow deposit, located in the southwestern Athabasca Basin continues to yield significant results. An updated mineral resource of the Arrow deposit announced in March contained an indicated resource of 179.5 M lbs at 6.88% U3O8 and an inferred resource of 122.1 M lbs grading 1.3% U3O8. In July the company announced a positive Preliminary Economic Assessment (PEA) that outlined financial highlights and proposed mining method.



NexGen's Arrow Deposit



- Denison Mines completed exploration programs on their portfolio of projects and continue to expand the Gryphon deposit on their Wheeler River project. A preliminary economic assessment on the combined Gryphon-Phoenix deposits was completed in 2016 and the project is progressing to prefeasibility in 2018.
- Fission Uranium Corp's Triple R deposit is located in the southwestern Athabasca Basin. Activities in 2017 comprised of deposit expansion drilling and metallurgy, geotechnical and hydrogeology studies in preparation for future pre-feasibility.



Ross McElroy, President, COO and Chief Geologist, Fission Uranium Corp.

## Gold

SSR Mining (formerly Silver Standard Resources) acquired Saskatchewan's only gold producer, Claude Resources in 2016. Their Seabee mine is expecting to produce between 75,000 and 85,000 ounces for 2017. SSR Mining undertook a combination of underground and surface exploration programs to expand and, to increase confidence in their resources. SSR announced the results of a PEA and filed a 43-101 Technical Report that supports a potential expansion of production and at a lower cost.

## Diamonds

Shore Gold consolidated ownership of the Star-Orion South Diamond project with the acquisition of Newmont's 31% interest of the Fort a la Corne joint venture. In June, Shore Gold announced entering into an agreement where Rio Tinto has the option to earn up to 60% of the project by spending \$70 million over the 7.5 years. In 2017, a drill program designed to support the geotechnical investigation of overburden and complete set up pilot holes for a future mini-bulk sampling program was completed.

## Base Metals

Exploration on base metals had a significant increase in activity in 2017 with \$6.4 million in exploration expenditures, a significant increase over the limited spending in 2016.

## Industrial Minerals - Potash

Some additional notable pre-production developments in potash are:

- BHP advances the shaft sinking of the Jansen project. There is no timeline committed towards a production decision. The project is waiting for better market conditions.
- Yancoal Canada completed feasibility and received approval for its Environmental Assessment from the Saskatchewan Ministry of the Environment for its Southey project.
- Western Potash Corp received Environmental Assessment Approval for the Milestone Phase 1 project and signed a non-binding letter of intent that contemplates an offtake agreement with China BlueChemical Ltd.
- CanPacific Potash Joint Venture (North Atlantic Potash and Rio Tinto) advance the Albany project through environmental assessment and pre-feasibility.

## Membership

The Exploration Section membership consists of a number of junior and senior exploration companies involved in exploring for uranium, potash, precious, base, rare and industrial minerals in Saskatchewan.

The Exploration Section held four meetings in 2017 with additional MARS, SMEGAC and Safety subcommittee meetings.

## Acknowledgements

Saskatchewan Geological Survey, Exploration and Development Highlights 2017

Respectfully submitted,  
Scott McHardy  
Chair, Exploration Section

# Industrial Minerals Section

Chair: Thomas Shaw, General Manager  
Westmoreland Coal Company - Estevan Mine

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There were no formal meetings held following the annual 2017 Annual General Meeting although frequent communications were held between the individuals in the coal sector.

Estevan Mines and Plants recorded a total recordable injury frequency rate of 1.31 in 2017 down from 4.62 in 2016, over 70% reduction. Poplar River total recordable injury frequency rate of 0.69 down from 1.40 in 2016, over 50% reduction. A large amount of effort was put into Risk/Change Management, Leadership Accountability, Cultural Development, OHC Empowerment Development, Health/Hygiene (Ergonomics) to help us drive down our injury rates and help promote a stronger safety environment. Everyone within the coal group is focused on actively making cultural changes to improve the Safety performance of the coal industry in Saskatchewan.

The Estevan Activated Carbon Plant produced 35,522 klb in 2017. The Estevan Char plant produced 69,000 Tonnes. This continues to be well under historical levels due to reduced demand in the United States.

Estevan mine production was ahead of budgeted numbers for produced coal at 5.714 million tonnes for 2017. Poplar River Mine had sales to SaskPower of 3.136 million tonnes in 2017.

SaskPower's Carbon Capture and Storage facility December update stated that since start-up in 2014, over 1.8 million tonnes of carbon dioxide have been captured and prevented from going into the atmosphere. To see the full January update and more info on SaskPower's Carbon capture plant go to <http://www.saskpower.com/about-us/category/blog/ccs-blog/>

NSC Minerals has one calcium chloride and three sodium chloride production facilities with operations associated with Nutrien's Rocanville and Vanscoy mines. Their products include road salt, drilling mud salts, road stabilization products, feed salt crystals, hide curing salt crystals and industrial application salt. Our congratulations to NSC Minerals, who received the NSBA Export Award in 2017.

The K+S Windsor Salt facility at Belle Plaine manufactures products made from evaporated salt (salt recovered from brine) that are used in household and food products, as well as for agricultural, water softening and industrial purposes.

Respectfully submitted,  
Thomas D. Shaw  
Chair, Industrial Minerals Section



Loading coal at Westmoreland Coal Poplar River Mine



NSC Minerals Rocanville Production Facility

# Metallic Minerals Section

Chair: Cameron Chapman, General Manager  
SSR Mining

## Highlights:

- Silver Standard Resources Inc. ("Silver Standard"), the owner of Seabee Gold Operation changed their name to SSR Mining Inc. ("SSR Mining").
- SSR Mining announced on September 7, 2017 the results of a Preliminary Economic Assessment ("PEA") for the Seabee Gold Operation in Saskatchewan, Canada prepared with SRK Consulting (Canada) Inc. The PEA evaluates the expansion of the Seabee Gold Operation to a sustained mining and milling rate of 1,050 tonnes per day for a seven-year period. Estimated gold production averages 100,000 ounces per year over the period from 2018 to 2023, a 29% increase from 2016 production.
- Seabee Gold Operation continues to find high grade intercepts at Santoy Gap, Santoy 8, and at Carr.
- Seabee Gold Operation achieved the highest annual production in its 27-year history, producing 83,998 ounces of gold in 2017.
- Seabee Gold Operation's three key capital projects for 2017:
  - ◊ Mill Gravity Circuit upgrade
  - ◊ Santoy GAP ventilation system upgrade
  - ◊ The new East Lake WTP treated and discharged 152,514 m<sup>3</sup> through the MBBR tanks for the year.
- Seabee Gold Operation matched its best environmental performance for the third consecutive year.
- HudBay Minerals Inc.'s ("HudBay") smelting and refining facilities in Flin Flon (which straddle the Saskatchewan/Manitoba border) produced Zn, Cu, and Precious Metals (Au and Ag on a gold-equivalent basis) from the 777 Callinan Mine, Reed Lake and Lalor Lake Mines during 2017;

## Gold

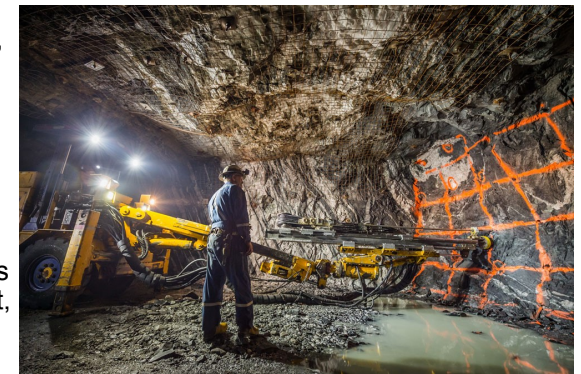
Gold retained its status as a risk hedge for 2017, particularly as North Korean conducted nuclear missile tests. The other big news was the UK Parliament voting to pass the Brexit Bill, and then one month later triggering Article 50 leave proceedings. Geopolitical tensions and market uncertainty about Brexit led to an increased demand for a strong insurance resource like gold. April brought with it the second highest gold price peak of the year at U.S. \$1,285 per ounce. Further nuclear testing from North Korea, coupled with several terrorist attacks across the world, stoked fears and uncertainties, keeping prices high. September was the most dramatic month of the year for gold, boasting the highest peak of 2017 due to a mix of the geopolitical strife caused by North Korean missile testing and a damning report from Goldman Sachs about the weakening of the US dollar as an asset. The end of 2017 saw gold prices fall further. In November the Bank of England raised interest rates in the UK for the first time in 10 years, as well as there being a surprise surge in value and demand for Bitcoin. December continued the price boom

for cryptocurrencies and the drop in gold price – reaching a low of U.S. \$1,240 per ounce – was driven slightly harder by the US tax reforms passed in the Senate. Subsequent demand capitalizing on the new low prices soon drove the gold price back up to \$1,300 per ounce.

Saskatchewan's 2017 gold production came entirely from SSR Mining's Seabee Gold Operation.

Safe production and good environment stewardship continue to be core values at the Seabee Gold Operation. For the fourth consecutive year, the Seabee Gold Operation set a new annual gold production record by producing 83,998 ounces in 2017. The record performance during the year can be attributed to a record mill throughput of 330,415 tonnes, or 905 tonnes per day, at an average grade of 8.25g/tonne. The Santoy mine complex mined approximately 82% of total ore milled in 2017, using the conventional longhole mining method. The Seabee mine accounting for the remainder of ore milled and applied the Alimak mining method. Ongoing delineation drilling and development continues to make significant progress on advancing the Santoy Gap deposit for production heading sequencing.

At the Seabee Gold Operation, ongoing surface and underground exploration drilling is planned for 2018, targeting Mineral Resource discovery and conversion of Mineral Resources to Reserves, including Mineral Resource discovery contiguous to Seabee at the Fisher project, where SSR Mining holds an option. Capital investments of US\$10 million at Seabee include additions to the underground and surface mobile equipment fleet, tailings expansion and upgrade to site camp infrastructure to support the longer mine life, all expenditures anticipated in the PEA. Capitalized development of US\$9 million is principally related to Santoy decline development and to establish stations for underground definition and exploration drilling. The Seabee exploration programs are focused in three areas including infill drilling and exploration at Santoy Gap, exploration on the Seabee land package for new deposits, including follow-up on the 2017 Carr project results, and initial drill programs on the Fisher property.



Seabee Gold Operations - Underground development drilling



# Potash Section

Chair: Larry Long, Vice President Operations, Potash Division  
Nutrien

## Base Metals

There continued to be no base metal production in Saskatchewan in 2017.

In Manitoba, Hudbay is currently operating the Lalor, 777 and Reed underground mines. Additionally, the Manitoba Business Unit operates two base metal concentrators (Flin Flon and Stall concentrators) and a Zinc Plant in Flin Flon. In 2017, all key production metals were within 2017 guidance ranges.

## Outlook

Gold production in Saskatchewan for 2018 is expected to be approximately 85,000 to 92,000 ounces of gold coming solely from the Seabee Gold Operation based on mill throughput of 1,000 tonnes per day.

Higher U.S. dollar and U.S. Treasury yields is expected to put downward pressure on gold and silver prices in 2018. Gold is estimated to trade between \$1,200-\$1,250 per ounce for 2018. The US Federal Reserve will likely raise its key policy rate at least twice by 25 basis points in 2018, which will significantly weigh on the precious metals prices.

Commodity	Jan. 3, 2017 Price	2017 High	2017 Low	Dec. 29, 2017 Price
Gold USD	\$1,148.65	\$1,346.25	\$1,151.00	\$1,296.50
Gold CAD	\$1,543.21	\$1,633.27	\$1,546.37	\$1,626.46
Silver USD	\$15.95	\$18.56	\$15.22	\$16.86
Silver CAD	\$21.43	\$24.64	\$19.62	\$21.15

Source: Kitco-London PM Fix, and Bank of Canada

## Membership

The Metallic Minerals Section consists of the following members: SSR Mining, and HudBay Minerals.

The Metallic Minerals Section met once in 2017.

Respectfully submitted,  
Cameron Chapman  
Chair, Metallic Minerals Section

## Record Global Potash Demand in 2017

Global potash demand was supported by strong consumption growth in most major markets and consistent customer engagement throughout the year. As a result, global potash shipments rose to approximately 64 million tonnes in 2017, an increase of six percent compared to 2016.

In China, consumption growth was supported by nutrient affordability and a move to high-value, nutrient-intensive crops. Good monsoon rains supported crop plantings and potash demand in India. Supportive palm oil prices and improved weather benefited potash demand in Other Asian countries. Demand in Latin America was boosted by favorable barter ratios and crop acreage expansion. In North America, demand remained healthy in response to strong affordability and a significant need to replenish soil nutrients.

New supply from producers in Canada and the former Soviet Union was outpaced by growth in demand, resulting in tighter supply/demand fundamentals compared to 2016. As a result, potash prices increased in all major markets. In Brazil and North America, spot market prices increased by 21 percent and seven percent, respectively, compared to the end of 2016.



Potash storage bin

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### **Saskatchewan Potash:**

Potash production in Saskatchewan totaled approximately 20.3 million tonnes KCl in 2017, up more than 2 million tonnes from 2016. Potash produced in the province accounted for approximately 32 percent of the global total. Nearly 60 percent of this production was shipped offshore, primarily to customers in Asia and Latin America.

In Saskatchewan most of the announced brownfield expansion projects have been completed. In February the Mosaic Esterhazy K3 shaft intersected the potash horizon and in May work transitioned from vertical shaft sinking to horizontal mine development. The K+S Bethune greenfield mine was completed in 2017 with marketable production starting in June and



K+S has produced the first tonnes of marketable potash in its new Bethune potash mine.

in October, the successful completion of the Scissors Creek expansion at PotashCorp Rocanville was announced, making this the world's largest potash mine. Throughout 2017, PotashCorp and Agrium transition teams worked through the "merger of equals" announced in 2016. On January 2, 2018 the successful completion of this merger to form the company Nutrien, was announced.

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### **Safety Achievements:**

Safety continues to be the top priority for the Saskatchewan potash industry. Potash producers are active in pursuing their goal of continuously improving health and safety in the workplace.

While the Injury Frequency Rate (IFR) has been decreasing over the last several years the Serious Injury or Fatality (SIF) rate has not been decreasing (flat trendline). This is an area that the entire industry is continuing to work towards making our sites as safe as possible.

During 2017 the SMA Safety Section began rolling out a new Training Program for Contractors that will be working on mine sites. This program provides a standardized training and a certificate so mining companies will know that the contractors on their sites have successfully passed the program. The intent is to have this program fully implemented by the end of 2018.

The SMA Potash Section met twice in 2017; members were PotashCorp, Agrium, The Mosaic Company and K+S Potash Canada.

Respectfully submitted,  
Larry R. Long  
Chair, Potash Section



Nutrien (PotashCorp) Scissors Creek

# Uranium Section

Chair: Liam Mooney, VP SHEQ & Regulatory Relations  
Cameco Corporation

Saskatchewan's total uranium production in 2017 is projected to exceed 34 million pounds.

The successful ramp up at Cigar Lake/McClean Lake, combined with strong production at McArthur River/Key Lake took place against the background of continued price challenges in the uranium market. Low demand and persistent oversupply continued to drive both spot and long-term prices down.

The uranium industry continues to contribute to the Saskatchewan economy and provide high-quality jobs, particularly in the north. 2016 employment statistics showed that more than 52% of the workforce at the northern sites are residents of northern Saskatchewan, including over 48% self-declared of aboriginal ancestry.

## Operational highlights

### Production

Actual 2017 production numbers are not disclosed by Cameco until the company's Q4 report in early February. Production numbers are based on the company's third quarter estimate for full year's production and final numbers are subject to change. Planned output in 2017 was from three sources:

Production	2017 (estimate)	2016 (actual)
Cigar Lake Mine / McClean Lake Mill	18.0 M lbs U <sub>3</sub> O <sub>8</sub>	17.3 M lbs U <sub>3</sub> O <sub>8</sub>
McArthur River Mine / Key Lake Mill	16.4 M lbs U <sub>3</sub> O <sub>8</sub>	18.0 M lbs U <sub>3</sub> O <sub>8</sub>
Rabbit Lake Mine & Mill	- M lbs U <sub>3</sub> O <sub>8</sub>	1.1 M lbs U <sub>3</sub> O <sub>8</sub>
Total (all operations)	34.4 M lbs U <sub>3</sub> O <sub>8</sub>	36.4 M lbs U <sub>3</sub> O <sub>8</sub>

## Operations update

### McArthur River/Key Lake (Cameco)

In an effort to continue to reduce costs, the production plan for 2017 included an extended summer shut-down with a four-week vacation period followed by maintenance at both operations. Accordingly, the 2017 production target at the McArthur River/Key Lake operation was reduced to 16.4 million pounds from the originally estimated 18 million pounds.

In November, Cameco announced that due to continued uranium price weakness, production from the McArthur River mining and Key Lake milling operations would be temporarily suspended, starting in January 2018. As a result of the suspension, the workforce at the operations will be reduced temporarily and the facilities will be maintained in safe shutdown state. The suspension and temporary layoff is expected to last 10 months. McArthur

River renewed its provincial Approval to Operate with a term of six years (i.e. until June 2023).

### Cigar Lake (Cameco)

Cigar Lake also implemented a summer shut down for maintenance and vacation, and has started a new work rotation. The shutdown went as planned with the mine and mill returning to full production as scheduled at the end of August. The year-over-year production increase at Cigar Lake is the result of the scheduled ramp-up of the operation.

### McClean Lake (AREVA)

In 2017, the production plan included the final push of ramp-up to achieve 18 million packaged pounds of uranium concentrate, taking into account a six-week summer shutdown. The McClean Lake mill remains the only uranium mill in the world capable of processing high-grade ore (100 times higher grades than world average) without diluting it.

McClean Lake achieved its target production without a lost time incident in 2017.

Following AREVA's request and the public hearing sessions held in La Ronge, Saskatchewan in June 2017, the McClean Lake Operating Licence was renewed by the Canadian Nuclear Safety Commission (CNSC) for a period of 10 years effective July 1, 2017 to June 30, 2027. The Saskatchewan Ministry of Environment also renewed McClean Lake's approval to operate Pollutant Control Facilities such as the McClean Lake mill, tailings management facility and Sink-Vulture Treated Effluent Management System for a term starting on October 30, 2017 and expiring on October 31, 2023.



AREVA Resources Canada McClean Lake Mill



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### **Rabbit Lake (Cameco)**

The Rabbit Lake operation remained in a safe state of care and maintenance for 2017, with no production from this site. Essential staff remain on site to ensure water treatment, environmental monitoring and other critical activities are maintained. Rabbit Lake also renewed its provincial Approval to Operate to June 2023.

### **Exploration and development**

The Saskatchewan Ministry of Economy reported in its *Saskatchewan Exploration and Development Highlights 2017 – Miscellaneous Report 2017-2* that estimated expenditures for uranium exploration in 2017 accounted for \$132.4 million of the estimated \$176.9 million in total mineral exploration spending in the province.

### **Decommissioning Highlights**

#### **Cluff Lake (AREVA)**

AREVA continues to monitor the Cluff Lake decommissioned mine site. The CNSC completed environmental sampling in August as part of their Independent Environmental Monitoring Program and will post results on their website once the results have been analyzed and interpreted. AREVA undertook some minor earthworks at Cluff Lake to remove unnecessary structures, such as a cobble dam near the tailings management area, regrade the surface of the closed landfill area, and remove an instrumentation housing, which is no longer used. A regulatory inspection with CNSC and Saskatchewan Environment personnel was conducted in September. In December 2017, CNSC staff presented a mid-term update report to the Commission, which concluded that the Cluff Lake post-decommissioning environmental performance objectives are being achieved.

AREVA no longer controls or restricts access to the Cluff Lake site. However, AREVA ensures that it is safe for people to undertake traditional activities at Cluff Lake, including the consumption of traditional foods. Studies show that it is safe for a visitor to hunt, fish, gather and trap at the Cluff Lake site and safe for their family to consume traditional food from the site.

#### **Beaverlodge (Cameco)**

Cameco continues to prepare the remaining Beaverlodge properties, on behalf of Canada Eldor Inc., for transfer to the Province of Saskatchewan's Institutional Control Program. In 2017, Cameco continued with replacement of concrete caps covering vertical mine openings, which is planned to be

completed in 2019. A comprehensive inspection of the entire site was completed in 2016, and the debris that remained on the properties following decommissioning was collected and disposed of in 2016 and 2017.

Cameco continues to work with the regulatory agencies to transfer properties to the Institutional Control Program once they meet the environmental performance objectives established in consultation with the regulatory agencies. The company's goal is to have all properties at Beaverlodge transferred to the provincial program by 2023 when the current Beaverlodge licence from the CNSC expires.

### **Northern Participation**

Saskatchewan's uranium companies continue to work at building business and workforce capacity in the north. While 2017 figures on employment and business spending are currently being compiled, the most recent Uranium in Saskatchewan fact sheet produced for the SMA notes that over \$123 million in direct wages was paid to northerners in 2016.

As of the end of 2016, the uranium industry directly employed 2,612 people in Saskatchewan and industry contractors employed an additional 734 people. Employment at mine sites in 2016, including contractors, was approximately 2,584 with over 52% of mine site employees, including contractors, being Residents of Saskatchewan's North. Further, 48% of mine site employees, including contractors, are of aboriginal ancestry.

The slight decline in total employment at northern operations continued in 2016 as large capital spending at Cigar Lake and McClean Lake continued to wind down. Nevertheless, Saskatchewan's northern uranium operations collectively remain the leading industrial employers of aboriginal people in Canada.



NRT transports consumables, mining materials, liquid bulk & dry bulk commodities and mining machinery to and from mine sites in northern Saskatchewan

Spending by uranium companies with northern-owned businesses totalled over \$312 million in 2016 or 43% of over \$726 million total spend.

In addition to company-led activities, stakeholders throughout the larger Northern Administrative District are kept informed on industry environmental performance through the following programs:

- the Northern Saskatchewan Environmental Quality Committee (NSEQC);
- the community-based monitoring undertaken for the Ya'Thi Néné Collaboration Agreement (YTN CA) with seven Athabasca communities (First Nation communities of Black Lake, Fond du Lac and Hatchet Lake and the four communities of Stony Rapids, Wollaston Lake, Uranium City and Camsell Portage); and
- the province's Eastern Athabasca Regional Monitoring Program. This monitoring continues to show that traditional food harvested downstream of uranium operations is safe to eat and remains a healthy dietary choice recommended by the northern medical officer.

The mines continue to host NSEQC and YTN CA members at site tours focused on environmental management and reclamation efforts at each operation.

Industry representatives continue to work with the communities of Pinehouse and English River First Nation to enhance business and employment benefits from uranium mining as outlined in their collaboration agreements.

In December 2017, Indigenous Works published a research study to establish a national Index on the state of corporate-Indigenous partnerships in Canada. The research was undertaken with more than 500 medium and large companies across a variety of sectors and regions who participated in an extensive survey and dialogue which probed their Indigenous engagements and partnerships. The study scored engagement for each business based on their awareness, readiness, strategies, consultations, and, where they exist, partnerships. Indigenous Works grouped corporate Canada into four tiers based on their engagement scores. The studies' average engagement score was 13 out of 100, with 85% of businesses classifying as disengaged. The resource sector had an average score of 23. AREVA Resources Canada Inc. scored 90 and Cameco scored 88, with both companies qualifying as 'committed partners'. Only 2% of businesses are considered 'committed partners', where consultation is the norm, partnerships are geared towards long-term sustainability (not short-term gain), and core engagement competencies have been internalized.

### Public support

Since 1990, Cameco and AREVA have commissioned an annual survey to measure the opinions and perceptions of Saskatchewan residents regarding the uranium mining industry. Province-wide, most recent polling results from the November/December 2017 survey indicates that the majority of Saskatchewan residents - 82% - continue to support uranium mining in the province, including 37% of residents who describe themselves as 'strongly' supportive of the industry.

In northern Saskatchewan, 73% of those polled support the continuation of uranium mining, including 38% who describe themselves as strongly supportive. The high level of public support for uranium mining in Saskatchewan is consistent with the long-term trend monitored since 1990.



Cameco Corporation Cigar Lake Mine

### Regulatory

The annual *Regulatory Oversight Report for Uranium Mines and Mills in Canada: 2016* was reviewed by the Canadian Nuclear Safety Commission (CNSC) at a public meeting December 13-14, 2017. The report, written by CNSC staff, covers safety, radiation health and environmental performance for the calendar year 2016. Covering five active uranium mining operations as well as decommissioned facilities in Saskatchewan, the report was again positive with all safety and control areas of these operation being rated as satisfactory. CNSC staff concluded that Canada's uranium mines and mills operated safely during 2016. That conclusion is based on the following highlights of the report:

- Radiation protection measures were effective and results remained as low as reasonably achievable (ALARA)
- No worker received a radiation dose that exceeded the regulatory limit
- The frequency and severity of injuries/accidents involving workers were minimal
- All conventional health and safety programs were effective in protecting workers
- No member of the public received a radiation dose that exceeded the regulatory limit

- All environmental protection programs were effective and ALARA
- Licensees complied with their licence conditions concerning Canada's international obligations.



Radiation Protection

### CNSC regulatory documents

Saskatchewan's two uranium mining companies continue to respond to developments in the CNSC regulatory framework. The following documents were subject to review in 2017:

- REGDOC-2.1.2, *Safety Culture*
- DIS-16-05 *Human Performance*
- REGDOC-2-5.4, *Design of Uranium Mines and Mills: Ventilation Systems*
- REGDOC-2.13.1, *Safeguards and Nuclear Material Accountancy*
- REGDOC-3.2.1, *Public Information and Disclosure*

### Provincial regulations

#### The Mines Regulations, 2003 (Saskatchewan)

A subcommittee of the SMA Safety Committee was struck to review the regulations to provide an "industry-wide" perspective in addition to company-specific responses. The consultation process for *The Mines*

*Regulations, 2003* consisted of an initial phase of focus group discussions (2015) followed by on-line surveys and finally an opportunity to see and comment on the proposed regulations in January 2016. There were a number of significant changes proposed but through the efforts of the SMA and a number of Cameco leads over 2016 and 2017, the concerns seem to have all landed in a reasonable place.

#### Woodland Caribou

Efforts have continued both provincially and federally to communicate the findings of the collaring program to ensure that its results are reflected in the updated National Recovery Strategy.

Industry has also raised concerns with the province about the proposed designation of barren-ground caribou as threatened under the *Species at Risk Act* and the maps that will be used for their range distribution.

The uranium mining industry continues to provide input into the provincial range planning process and has representation on the National Boreal Caribou Knowledge Consortium. At both the provincial and federal level, efforts are made to ensure that considerations specific to northern Saskatchewan are considered in potential management options.

### Federal regulatory developments

#### Canadian Government Review of Environmental and Regulatory Process

In 2016, the federal government commissioned an Expert Panel to review federal environmental assessment processes. The Expert Panel report was made public in April 2017. The main problems with the Panel recommendations are a complex and unworkable assessment process, an incoherent governance structure, and failure to consider the role of provinces. The Report's recommendations for what should be assessed are likely to result in an expansion in the types of projects and activities subject to federal assessment compared to the current CEAA.

In June 2017, the government then released for comment a Discussion Paper outlining its response to four reviews: the *Canadian Environmental Assessment Act*, the *Fisheries Act*, the *Navigation Protection Act*, and the National Energy Board. The Discussion Paper is a high-level indication of direction, with much of the substantive detail yet to be developed. It has some encouraging aspects and appeared to reject (or is at least silent on) the most problematic recommendations of the Expert Panel on federal environmental assessment processes. Much of the critical details remains to be developed, including criteria for developing a new Project List, project decisions in the absence of



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regional assessments, early engagement and planning, moving to impact assessment, the decision process (including the role of the CNSC) and criteria, and the transition for projects undergoing federal assessment as the new Act comes into force. The proposed changes to the *Fisheries Act* and the *Navigation Protection Act* will also require elaboration before their full impact is clear. While the changes to this legislative framework were supposed to be published in late 2017, we are still awaiting the legal text.

#### *Metal Mining Effluent Regulations (MMER) Review*

In late December 2016, ECCC published a document entitled “Proposed Amendments to the *Metal Mining Effluent Regulations*.” While there has been significant progress made on this file since the original discussion paper was published in 2016, the proposed amendments presented a departure from where the discussions had terminated in 2016. Comments were submitted by the SMA to ECCC in regards to the proposed amendments. Ultimately, the federal government published the proposed amendments to the *Metal Mining Effluent Regulations* (MMER). The mining industry was disappointed that a number of changes to the legal text were still included despite assurances from Environment and Climate Change Canada (ECCC) that those that had first appeared in the Discussion Paper were going to be walked back. Comments were submitted by the SMA and by the MAC. Efforts continued throughout 2017 to express our concerns.

#### *Carbon Tax*

##### *Proposed Expansion of the Greenhouse Gas Reporting Program*

ECCC has proposed reducing the reporting threshold for all Canadian industrial facilities from 50 kt to 10 kt CO<sub>2</sub>e. Industry provided a submission opposing this on a number of grounds, including that it is not adequately coordinated with provincial greenhouse gas (GHG) emission reporting requirements, or new initiatives being introduced under the Pan-Canadian Framework on Clean Growth and Climate Change. Fundamentally, requiring all industrial facilities that emit more than 10 kt CO<sub>2</sub>e of direct GHG emissions to report would not improve Canada's ability to meet published national near- and long-term emission reduction goals, and would instead divert resources from initiatives that could improve environmental performance to administrative activities necessary to report data that has no identified value.

##### *Federal Carbon Pricing Backstop*

ECCC also published its Technical Paper on the Federal Carbon Pricing Backstop (the Paper) and the Pan-Canadian Framework on Clean Growth and Climate Change (the Framework). The Framework outlines a number

of mechanisms for how federal and provincial governments intend to reduce emissions, including a price on carbon pollution. Industry submitted that carbon pricing should be applied broadly and not burden the vulnerable. We argued that the goal of this carbon pricing plan should be to address a specific policy problem: the reduction of carbon emissions that contribute to climate change. It should not serve as an income re-distribution plan or to pay for general government expenditures. We then added that the only way to ensure that all final fuel users have an equal opportunity to reduce emissions is to return carbon revenues to the final fuel users through revenue recycling, i.e. the final fuel user who pays a carbon price should receive its proportionate share of revenues paid for emission-reduction initiatives.

We also submitted that a workable output-based pricing (OBP) system must be simple, transparent, and ensure that Canadian industry remains competitive in a global marketplace as we state above. As proposed, the details of how the proposed OBP system will protect the competitiveness of Canadian industry are unclear. Therefore, adequate time must be taken to clarify the details of the OBP system and to ensure the system can be implemented, including how emissions intensity will be calculated and compared, prior to adoption of any carbon pricing mechanism in backstop jurisdictions, unless another equivalent protection mechanism to prevent the erosion of Canada's economy is put in place. Finally, we advocated for a simple process to return revenues and that there should not be a complex reporting and verification requirement.

#### **Membership**

The Uranium Section includes the following Members: Cameco Corporation, including McArthur River, Key Lake, Rabbit Lake and Cigar Lake operations and AREVA Resources Canada, including its McClean Lake operation.

The Uranium Section met three times in 2017.

Respectfully submitted,  
Liam Mooney  
Chair, Uranium Section

# Environment Committee

Chair: Jeff Meadows, M.Eng, P.Geo  
Nutrien

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## Overview

The SMA Environment Committee was very active in 2017. Four formal quarterly meetings were held over the course of the year as well as numerous conference calls to discuss specific issues. The meetings were well attended by committee members and included invited guests and representatives from the provincial government.

The primary focus of the Environment Committee in 2017 was on regulatory change, which included proposed changes in both federal and provincial legislative and regulatory requirements. In keeping with the SMA strategic plan, the committee engaged with both federal and provincial governments and officials over the course of the year, providing input on proposed regulatory changes and advocating for a competitive and efficient environmental regulatory system.

On November 21, 2017 the SMA President participated in Mining Day on the Hill activities in Ottawa. Hosted and facilitated by the Mining Association of Canada, these activities are centered on advocating for positive changes to federal legislation, regulations and policies to address issues that are important to the mining industry.

## Federal Regulatory Issues

### Species at Risk

The Environment Committee remained active on this file in 2017 as concern remains that the current recovery strategy for Woodland Caribou and the recovery strategies being developed by Environment and Climate Change Canada (ECCC) for other listed species will unduly constrain mining development in Saskatchewan. The SMA is also represented on the MAC SARA Task Force, which advocates at the national level. In 2017 the SMA held SARA WG meetings in February, April, July, October and November as well as a quarterly meeting with MoE/ECCC on March 20th.

On March 11<sup>th</sup>, Environment and Climate Change Canada published a proposal to amend Schedule 1 of the Species at Risk Act in the Canada Gazette, Part I. The proposed amendment would see the addition of 11 migratory birds, 5 of which occur in Saskatchewan. SMA provided comments back in March 2014; the comments highlight a data gap and lack of relevance to healthy populations within Saskatchewan. The SMA submitted a subsequent response on April 6<sup>th</sup>.

The Woodland Caribou file was very active in 2017 at both the federal and provincial level. To help support this work, the Chair of the SMA SARA Working Group attended meetings related to the SK2 Central Woodland caribou range planning process as well as participated on the MAC SARA Task Force.

On October 30<sup>th</sup> the MoE released for 60-day public comment their “Draft Range Plan for Woodland Caribou in Saskatchewan – Boreal Plain Ecozone – SK2 Central Caribou Administration Unit”. The SMA provided a letter to Minister Duncan expressing our concerns with respect to the failure of the MoE to incorporate peer-reviewed information related to habitat utilization and disturbance levels.

Also with respect to Woodland Caribou, the SMA provided a response to ECCC including comments on the proposed Woodland Caribou Action Plan that was released by ECCC on July 27<sup>th</sup>. Concerns continue to be centred on the need for ECCC to utilize sound science and to incorporate industry-led research. The letter also expressed support for a member of MAC to represent the SMA on the National Boreal Caribou Knowledge Consortium. On October 31<sup>st</sup> ECCC released their 5-year review on the implementation of the Woodland Caribou Recovery Strategy. The good news is that the U of S population research (led by Dr. Phil McLoughlin) was included and SK1 has moved from “not available” to “stable”; however, ECCC ignored much of the other scientific information provided by industry (18 of 21 studies).

On December 15<sup>th</sup> the SMA submitted a letter and 3 supporting technical research documents to the MoE regarding the province’s Draft Range Plan for Woodland Caribou in Saskatchewan – Boreal Plain Ecozone – SK2 Central Caribou Conservation Administration Unit. The primary issues include: reliance on the flawed ECCC methodology, failure to include sound research, and failure to incorporate comments provided by industry.

The SMA, Cameco and various other associations participated in a SARA discussion with ECCC Parliamentary Secretary Jonathan Wilkinson and MoE Minister Scott Moe on April 13<sup>th</sup>. This was an opportunity for the federal and provincial governments to provide an update on their respective SARA activities (with additional time spent discussing the caribou file) and for us to express our concerns with timing and process.

On June 17<sup>th</sup> Environment and Climate Change Canada (ECCC) published a proposal to amend Schedule 1 of the Species at Risk Act in the Canada Gazette, Part 1. As proposed, the amendment will influence seven species with ranges extending into Saskatchewan. Of interest to our members are the Gibson’s Big Sand Tiger Beetle, American Badger and Western Tiger Salamander. The SMA submitted a response on July 6<sup>th</sup>.

The SMA has continued to provide support to the \$2-million, five-year provincial woodland caribou research program, which was initiated in 2014 in the boreal shield region. Led by Dr. Phil McLoughlin of the University of Saskatchewan, the program addresses population trends and critical habitat for woodland caribou

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in the boreal shield region of northern Saskatchewan. Member companies have provided direct support (financial and/or in-kind) to the program and the SMA. On November 22, 2016 the University of Saskatchewan (Dr. Phil McLoughlin) released its Interim Report on the caribou population in Northern Saskatchewan's Boreal Shield region. The report is entitled "Population dynamics and critical habitat of woodland caribou in the Saskatchewan Boreal Shield". The SMA and our northern members have provided both financial and in-kind support for this project. The link to the news release is at <http://news.usask.ca/media-release-pages/2016/u-of-s-research-finds-good-news-for-saskatchewan-woodland-caribou-.php>

#### Climate Change

Following up on the federal government's October 2016 announcement of a direct price on carbon of \$10/tonne (CO<sub>2</sub>e) in 2018 rising to \$50/tonne in 2020, the federal government released its "Technical Paper on the Federal Carbon Pricing Backstop" for public comment on May 18, 2017. The SMA provided its response to Minister McKenna on June 23<sup>rd</sup>. A number of recommendations were made to the federal government, the most important being:

- Any revenue generated by the carbon tax be directly returned to the final fuel using industries that were required to remit in the first year of collection.
- As an EITEI there an exemption from a carbon levy provided for Saskatchewan mining operations.
- If there will be no consideration for EITEI being exempt then all emitters that meet the 50 kt CO<sub>2</sub>e per year threshold should be required to be included in the output-based pricing system.
- The implementation of the carbon pricing backstop be deferred until the details of the output-based pricing system are defined and this system can be put in place.
- The mining industry be extensively consulted as early as possible in the clarification of the output-based pricing system and that ECCC ensures that sufficient resources are available within their department to carry out these important discussions.
- The carbon levy not come into effect until October 1, 2018 in order for those subject to the levy to become familiar with the details of the federal carbon pricing backstop.

The SMA Chair and VP attended a meeting with Minister McKenna and senior officials from ECCC and CEAA on July 25<sup>th</sup> to discuss the proposed federal carbon pricing backstop and proposed changes to CEAA, 2012.

#### Greenhouse Gas Emissions Reporting Program

On May 5<sup>th</sup> the federal government released for public comment proposed changes to the Greenhouse Gas Emissions Reporting Program (GHGRP). The major change for our members would be the reduction in the reporting threshold from 50 kt CO<sub>2</sub>e to 10 kt CO<sub>2</sub>e. In the SMA's letter of June 26<sup>th</sup> we opposed this proposed change on the basis that it would only realize an improvement of 2.2% in overall national emissions figures compared to the current estimates with a more than 150% increase in the number of facilities reporting (including some of our members). On December 30<sup>th</sup> the Government of Canada published in the *Canada Gazette*, Part I a notice that the new reporting threshold of 10 kt CO<sub>2</sub>e would apply to 2017 emissions and that a report on these emissions is due by June 1, 2018. The link to the notice is <http://www.gazette.gc.ca/rp-pr/p1/2017/2017-12-30/html/notice-avis-eng.html#na2>

On December 13<sup>th</sup> ECCC released the Clean Fuel Standard Regulatory Framework document for public review. The Framework will apply to transportation, buildings and industry. The stated goal is to achieve at least 30 Mt CO<sub>2</sub>e of emission reductions by 2030 and by a further 30 Mt CO<sub>2</sub>e annually commencing in 2030.

#### Federal Clean Fuel Standard

On February 24, 2017 the Government of Canada released for comment the discussion paper on Clean Fuel Standards (CFS). Consultations with stakeholders was undertaken in order to develop a regulation under the Canadian Environmental Protection Act, 1999 to reduce Canada's greenhouse gas (GHG) emissions through the increased use of lower carbon fuels and alternative technologies. In a letter to ECCC on May 8<sup>th</sup> the SMA indicated that we do not support the inclusion of industrial or building fuels in this new regulation, but would instead suggest an incentive-based approach to help encourage movement to lower carbon fuels.

#### Metal Mining Effluent Regulations

On May 13<sup>th</sup> the federal government published in the *Canada Gazette*, Part I, Vol. 151, No. 19 the proposed Regulations Amending the *Metal Mining Effluent Regulations* and a letter was submitted by the SMA on July 10<sup>th</sup> in response to this notice. The link to the notice is <http://www.gazette.gc.ca/rp-pr/p1/2017/2017-05-13/pdf/g1-15119.pdf>.

#### Coal Effluent Regulations

On January 30<sup>th</sup> the Government of Canada made available to stakeholders a document entitled "Proposed Regulatory Framework for Coal Mining" to initiate formal consultations on the development of proposed Fisheries Act regulations for coal mining effluent. ECCC have indicated that they will be using the Metal



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Mining Effluent Regulations (MMER) as a template. This is problematic as the MMER model is not appropriate for prairie coal mining operations. On February 28<sup>th</sup> the SMA and a representative from Westmoreland attended an ECCC workshop in Saskatoon to discuss the “Proposed Regulatory Framework for Coal Mining”. On March 31<sup>st</sup> the SMA sent a letter to ECCC regarding SMA comments on the ECCC consultation document.

On November 10<sup>th</sup> ECCC released for public comment the second discussion paper related to proposed new Coal Effluent Regulations. On November 15<sup>th</sup> the SMA and Westmoreland jointly arranged for a tour of the Poplar River Coal mine for representatives from ECCC, MoE and the SMA to foster a better understanding of the reality of prairie coal mining operations. The goal of the tour and presentation was to provide ECCC officials with a greater understanding of the differences between mountain and prairie coal mining operations in order to clear up misconceptions and to aid in the development of the new regulations. ECCC anticipates that they will publish draft regulations in *Canada Gazette* Part I in December 2018.

#### Code of Practice for the Management of PM2.5 Emissions in the Potash Sector in Canada

A Government Notice was posted on the Canada Gazette Vol. 151, No. 36 - September 9, 2017. This was a notice with respect to the “Code of Practice for the Management of PM2.5 Emissions in the Potash Sector in Canada”.

#### Canadian Environmental Assessment Act

The Canadian Environmental Assessment Agency (CEAA) launched a review of the federal environmental assessment process on June 20, 2016 and the Agency continued their consultations in 2017. The SMA continued to meet with federal and provincial ministers, senior officials and participated on the MAC CEAA Task Force.

The Expert Panel Report commissioned by the federal government was released for comment on April 5<sup>th</sup> and the SMA’s comments were submitted on May 4<sup>th</sup>. The federal government subsequently released a discussion paper on June 29<sup>th</sup>, which encompassed the CEAA review as well as the reviews of the *Navigation Protection Act* and the *Fisheries Act*.

In follow up to a meeting with Minister McKenna and Minister Duncan on September 5<sup>th</sup>, the SMA sent a letter on November 1<sup>st</sup> to Minister McKenna requesting a follow up meeting to discuss proposed CEAA amendments. The SMA still has a number of concerns with respect to the applicability of the Act, revised Project List Regulations, as well as the proposed process that will need to be followed once the new Act comes into force. The indications are that the federal government plans to table a bill in Parliament in early 2018 to amend or replace the *Canadian Environmental Assessment Act*.

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#### Fisheries Act

On November 30, 2016 the SMA submitted a brief to the House of Commons Standing Committee on Fisheries and Oceans in association with its review of the Fisheries Act. The brief recommended three principles, which included maintaining proper constitutional and legal focus, limiting amendments to only those needed to clarify existing requirements and to ensure an appropriate transition and implementation plan and process are in place prior to any amendments coming into force.

The SMA provided a letter to Fisheries and Oceans Canada on August 25<sup>th</sup> expressing support for the current Act and recommending a number of changes with respect to operational practices and internal support systems.

#### Navigation Protection Act

The SMA provided a letter to Transport Canada on August 25<sup>th</sup> expressing support for the current Act along with other recommendations including the recommendation that existing case law, including the use of the “aqueous highway” test remain the basis for determining whether or not waters are legally navigable.

### **Provincial Regulatory Issues**

#### The Mineral Industry Environmental Protection Regulations, 1996

On November 9<sup>th</sup> the MoE sent the mining industry correspondence related to their “Red Tape review of *The Mineral Industry Environmental Protection Regulations, 1996*”. The SMA provided a response on December 13<sup>th</sup> and indicated continued support for the regulations and provided suggestions to further reduce regulatory red tape.

#### The Reclaimed Industrial Sites Act

On October 20<sup>th</sup> the SMA sent a letter to MECON regarding *The Reclaimed Industrial Sites Regulations* amendment (which included comments on proposed Act amendments). On November 6<sup>th</sup> Bill No. 85 was introduced in the Saskatchewan Legislature to amend *The Reclaimed Industrial Sites Act*. The amendments are largely based on feedback that MECON has received from the SMA, SMA members and regulators (MoE and CNSC). Industry is generally supportive of the proposed amendments. The province is expecting to have an amended Act and regulation in place by May of 2018.

#### The Pipelines Act, 1998

The SMA met with senior representatives from the Ministry of Economy on January 18<sup>th</sup> and submitted a letter to the Ministry on January 20<sup>th</sup> regarding proposed amendments to *The Pipelines Act, 1998*. The focus of the meeting and letter was to ensure that the mining industry isn’t captured by the proposed

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enhancements to the Act as our pipelines are already regulated pursuant to EMPA, 2010. During the meeting the Ministry indicated it was not their intent to capture mining pipelines and were open to revising the Act to provide clarity.

#### *The Discharge and Discovery Reporting Standard*

A revised Discharge and Discovery Reporting Standard (2017 Standard) was published on October 6, 2017. Its effective date is October 1, 2017. The 2017 Standard is available at:  
<http://www.publications.gov.sk.ca/details.cfm?p=80028>

In response to the notice the SMA reached out to the MoE expressing concern with the lack of opportunity to provide input at the front end and that there was no notification after the fact. As a result of our concerns the MoE has implemented a process whereby any amendments by the Environmental Protection Branch will be communicated in advance and will only take place once every 6 months.

#### *Saskatchewan Environmental Quality Guidelines*

The SMA submitted a letter on January 9<sup>th</sup> to the MoE regarding proposed amendments to the Saskatchewan Environmental Quality Guidelines. Included in the comments was a request for the MoE to work with the Water Security Agency to establish a common set of water quality guidelines for surface waters in Saskatchewan. This request was made as there are currently two guidelines that apply to surface waters provincially.

The SMA submitted a letter on May 30<sup>th</sup> to the MoE regarding additional proposed amendments to the Saskatchewan Environmental Quality Guidelines. Included in the comments was a further reminder for the MoE to work with the Water Security Agency to establish a common set of water quality guidelines for surface waters in Saskatchewan and a reminder that these were meant to be guidelines and references to “legally binding standards” should be removed from the document.

#### *Saskatchewan Solid Waste Management Strategy*

The SMA submitted a letter on May 26<sup>th</sup> to the MoE regarding the “Saskatchewan Solid Waste Management Strategy” discussion paper. This was a very high-level consultation document and the SMA provided its general support for the consultation with a request to conduct more detailed discussion with our industry once they are further along in the process.

#### *Saskatchewan Stack Sampling Manual*

On July 24<sup>th</sup> the MoE released for comment their proposed revisions to the “Saskatchewan Stack Sampling Manual”. The SMA provided a response on September 15<sup>th</sup>.

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#### *Tailings Management*

A half day tailings management workshop was held in conjunction with the Q4 Environment Committee meeting. The committee was provided with an update of the recently released Mining Association of Canada (MAC) guidance document which is entitled A Guide to the Management of Tailings Facilities, Third Edition. <http://mining.ca/documents/guide-management-tailings-facilities-third-edition>

#### *SMA Environmental Forum*

The professional development sub-committee held meetings in 2017 to plan the 3<sup>rd</sup> Biennial SMA Environmental Forum. The forum is a technical conference (concurrent sessions), which will be held over two full days October 17-18, 2018 at the Saskatoon Inn. The forum will be open to SMA members, government, consultants, environmental lawyers, university professors and select university students. A welcome reception will be held the evening of October 16<sup>th</sup>.

#### **Other Activities**

The SMA Vice President – Environment, Safety and Regulatory Affairs also actively participates on a number of MAC committees, task forces and working groups as well as the Saskatchewan Chamber of Commerce Environment Committee and sits as a board member (and past chair -2015) of the Western Yellowhead Air Management Zone.

#### **Acknowledgements**

The 2017 Environment Committee Executive consisted of:  
Chairperson: Jeff Meadows, PotashCorp  
Recording Secretary: Erin Robertson, K+S Potash

Environment Sub Committee chairs:  
SARA Working Group – Brady Balicki, Cameco  
Professional Development Sub-committee – Sarah Benson, AREVA

Thank you to all of the members of the Environment Committee for their participation and contributions to the numerous subcommittees, activities and government submissions that the Environment Committee was involved in this year. A very special thank you to Brad Sigurdson and Pam Schwann for their ongoing support throughout the year!

Respectfully submitted  
Jeff Meadows M.Eng, P.Geo.  
Chair, Environment Committee

# Geotechnical Committee

Chair: Katy Richard  
Mosaic Esterhazy

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As always, the focus of the SMA Geotechnical Committee in 2017 was safety.

This year—more than any other—we dedicated more time at our meetings to sharing all reported/reportable (to the Mine's Branch) *Dangerous Occurrences* pertaining to ground control. In the past, there had been some sharing if the subject came up; however, this year a greater effort was made to ensure any and all “close calls” were discussed among the group as well as what corrective actions resulted. Typically, this came in the form of PowerPoint presentations so that the group could see pictures and get a better understanding of the situations involved. In total, 11 relevant *Dangerous Occurrences* were reviewed within seven presentations between the spring and fall meetings.

Additionally, we committed to having a theme at each meeting, so that presentations (unrelated to separate Dangerous Occurrence presentations) would be centered around the same topic as well as many of our tour stops.

In April, the meeting was held in Colonsay (Mosaic) with a predetermined theme of *Mineralogical Separations*. As a result, the group toured several areas: one where there were surprising elevation changes in marker clays within anomalous ground, and one where unexpected mineralogical separations were occurring in the back. The latter was discussed again in more detail during the business meeting in a presentation.

The following week, several members of the Geotechnical Committee volunteered with the SMA to attend the Minerals and Products (MAP) event in La Loche, Saskatchewan to help run a section of the *Mining Pavilion*. Despite the exhibit focusing heavily on potash solution mining, we were able to add increased value by facilitating discussions with teachers and students as well as answering any questions regarding conventional potash mining.

The Geotechnical Committee also provided a volunteer for the M4S event during CIM MEMO conference in Saskatoon in September.



In September, the committee reconvened in Lanigan with the theme of *High Stress*. The tour visited several [high-stress] areas and focused on remediation efforts to extend the life of these entries. The committee was extremely impressed by the innovative use of cable bolts at their silo bin undercut, and their collaboration with DSI in Saskatoon. Everyone was in agreement that this type of ground control measure could be used in the future at other sites. To finish the business meeting, we had four presentations (one per company plus an additional presentation from the host site) on the topic of high stress (what it means and how it is dealt with at different sites).

There will be a few topics from this year that will be carried over into 2018:

- At the 2017 AGM, it was discussed that it would be beneficial for the Geotechnical Committee to have a place to store all of our previous minutes and agendas as well as any other documents that have been created over the years—preferably on the SMA website. Because the website was being overhauled through the better part of 2017, and user portals were not up and running until near the end, the document migration should be completed before the end of Q2 (2018).
- PCS may partner with DSI to test a new pumpable resin product. If tests do take place, PCS has agreed to share results with the committee.
- Currently, New Concept Mining is working with Cameco to test some yieldable rockbolts. Additionally, the IMII is looking to develop technology with yieldable rockbolts. The testing is on-going, but there may be some results to share in 2018.

The Geotechnical Committee participated in planning the annual Mine Safety Summit.

Overall, 2017 was a successful year for the Geotechnical Committee in terms of safety. We managed to share potentially serious ground control incidents between the sites as well as mitigation strategies. Additionally, we had meaningful themes at our semi-annual meetings that fostered important dialogues and presentations. We will continue these conversations in 2018 with a Chairperson from PCS Allan and Secretary from Mosaic Colonsay.

Respectfully submitted,  
Katy Richard  
Chair, Geotechnical Committee

# Human Resources Committee

Chair: Jennifer Jungwirth, Mosaic Belle Plaine  
and Ken Leclaire, Nutrien

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The SMA Human Resources committee reviewed and continued its focus on the SMA's strategic goals - Enhance Public Awareness and Support; Cultivate a Diverse, Inclusive and Talented/Skilled Workforce; Advance Safety and Environmental Stewardship; and Advance Indigenous Participation.

Also in 2017, the HR Committee supported and participated in the Family Safety Zone at the 49th Annual Emergency Response Mine Rescue Skills Competition.

**2017 Human Resources Committee Meetings:**  
**March 1, 2017**  
SMA Annual Meeting  
Review of 2016 committee achievements and planning for 2017.



Family Safety Zone at the Emergency Response Mine Rescue Competition

## **June 2017**

Focus: Legalization of Marijuana

Session: Panel Chair – Steven Sieferling, Chief Counsel, Mosaic moderated a discussion on the impact of legalizing marijuana in the workplace with panel members from K+S, Cameco, PotashCorp and Mosaic.

## **October 2017**

Focus: Legalization of Marijuana - Impact and Policy Review & Proposed legislative change review with SK Apprenticeship

Session: Joint session with SMA Safety Committee to discuss the impact of legalizing marijuana in the workplace on policy and safety with panel members from Agrium, PotashCorp, Cameco, K+S and Mosaic. Followed by a review of potential legislative changes and the impact on job classification within the apprenticeship.

## **November 2017**

Focus: Labour Law Review

Session: Legal Panel – Dwayne Chomyn, QC, Nuemann Thompson & Crystal Norbeck, QC, Gerrand Rath Johnson reviewed various labour issues and debated the merits of arbitrations impacting the mining industry with members from K+S, Agrium, Mosaic, Cameco and PotashCorp.

## **Other Involvement:**

Committee members and associates have again been involved in a number of initiatives and sub-committees. Some of these include:

- Annual Wage Survey
- Annual Benefits Survey
- WCB Committee
- Apprenticeship
- Provincial Legislation
- Federal Legislation
- Saskatoon and Regina Area Industry Education Councils
- Immigration
- WIM/WiN-SK

As a committee, we continue to build relationships, share best practices and support the mining industry's reputation as the employer of choice.

Thank you to the SMA and the HR Committee for all their support in 2017.

Respectfully submitted,  
Jennifer Jungwirth and Ken Leclaire  
Chair, Human Resources Committee



# Public Awareness Committee

Chair: Tyler Dunn  
Nutrien

## PAC Mandate

The Public Awareness Committee's mandate is to enhance public awareness, understanding and support of the Saskatchewan mining industry and its benefits to the province, the country and the world. The PAC mandate is also to attract and retain existing and potential member companies by providing information and activities that demonstrate the benefits of SMA membership.

PAC continued to support the SMA's Strategic Action Plan in 2017 providing oversight in the development of the semi-annual ORE storyboard, activities for Mining Week and the Mining Supply Chain Forum, and supporting the GeoVenture "Teachers Tour" Program.

## 1. Enhance Public Awareness and Support

### 1.1 Public Outreach

- **ORE – The Official Publication of the Saskatchewan Mining Association** – ORE magazine communicates information about the Saskatchewan mining industry to over 23,000 people including elected federal, provincial and municipal officials; general public, and post-secondary institutions. ORE is published semi-annually in April and November and is available on the SMA Website. ORE provides a revenue stream for the SMA, supporting programming including education outreach initiatives. Spring/Summer 2017 theme "Supplying Value; Fall/Winter 2017 theme "Future Prospects".
- **Saskatchewan Mining Week May 29 – June 4. "Mining in Transformational Times"**  
The SMA and its member companies supported Mining Week throughout the province with a variety of local activities including meetings with community officials and organizations, displays, media interviews, print and advertising. Print ads and newspaper supplements in Saskatoon, Regina, Moose Jaw, Coronach, Esterhazy, Estevan, Moosomin, Lanigan, LaRonge, Prince



SMA Chair, Jessica Theriault launches Saskatchewan Mining Week at the Saskatchewan Legislature

Albert, Yorkton, Swift Current and Kindersley. Details of Mining Week activities are available at the SMA website:

<http://saskmining.ca/Mines-in-Saskatchewan/Saskatchewan-Mining-Week>

- **Website** - SMA's new website was officially unveiled in May and received over 14,000 visits throughout the year.
- **Social Media** – the SMA twitter account, @SaskMiningAssoc, continues to be used to enhance public communication of SMA activities and member news. The account has over 1900 followers. SMA also has a Facebook page which is linked with twitter and the page has over 350 likes and followers. Instagram is another social media that is used mainly for education outreach.

### 1.2 Education Outreach

In 2017 the SMA Education Outreach Programs had over 2400 students and educators directly involved in SMA events and workshops. SMA Education Outreach Programs target the Ministry of Education's primary and secondary science renewal, and opportunities to introduce mining-related lesson plans and resources that are linked to these new curricula.

- **Minerals and Products (MAP) - La Loche** April 24 and 25, 2017. The event showcased six main stages of the mining cycle – *Exploration, Mining, Processing, Products, Sustainability, and Safety*, their roles in mineral resource development and the diversity of career opportunities each sector offers. Students experienced hands-on activities as they proceeded through the six pavilions over roughly a two hour period. 196 students and 22 teachers from La Loche Community School (Dene High and Ducharme Elementary), Clearwater River Dene Nation School, and the Northlands College Tri-Trades participated in the event. Thirty-eight industry professionals and four students volunteered for this event. Participating companies and institutions: Saskatchewan Geological Survey, NexGen, Mosaic Colonsay, Mosaic Esterhazy, K+S Potash,



Exploration and Mining Pavilions at MAP event in LaLoche.



PotashCorp Lanigan, AREVA, Cameco, SSR, Purepoint, CNSC, Fission, ISO Energy, Denison Mines, ALX Uranium Corp, Graham Construction, Aurora Communications and four student volunteers including two PhD candidates from the Department of Chemistry at the University of Saskatchewan and two third-year students from the La Ronge Northlands College Mine Tech program.

- **GeoVenture - The SMA Rock'n the Classroom GeoVenture Teachers Program** took place from August 14th – 19th inclusive. The purpose of the event is to provide educators with first-hand knowledge of the Saskatchewan mining industry by visiting a variety of mining sites across the province and learning about the economic contributions, (employment, business), safety, environmental and career opportunities related to the mining industry. This year there were 17 teachers and 3 resource people. Sites visited K+S Potash Bethune Mine, Castle Butte Geology Section, Westmoreland Coal Poplar River, Potash Interpretive Centre, PotashCorp Rocanville Scissors Creek and Cameco McArthur River Mine.



SMA GeoVenture touring PotashCorp Rocanville Scissors Creek

- **M4S (Mining4Society)** - SMA hosted this event (equivalent to SMA MAP) as part of CIM MEMO 2017 September 25 and 26 at TCU Place, Saskatoon. Over 650 grade 7 students in the Saskatoon Public, Greater Saskatoon Catholic, Prairie Spirit and Saskatoon Tribal Council areas participated over the 2 days. Saskatoon Industry Education Council was our event partner and coordinated the school participation.



Processing Pavilion at M4S

- **Potash Kits** - a kit to accompany lesson plans for grades 4, 7, Chemistry 30, Physical Science 20, Earth Science 30, and the Practical and Applied Arts Energy and Mines Potash modules. Kits were assembled through a partnership between the SMA and the Potash Interpretive Center in Esterhazy.
  - 200 kits assembled and shipped to cover requests (130) and future workshops.

- **Workshops**

- Teacher Professional Development Workshops/Displays
  - Regina Teacher's Convention (Mar. 17<sup>th</sup>, Evraz Place). Approximately 50 teachers came by the booth.
  - RCSD Career Day at Miller Comprehensive High School, Regina, June 1.
  - Northern Area Teachers Association (Oc. 11 & 12, PA)
- Student Science Fairs/Workshops
  - STEAM event at the Canada Wide Science Festival, May 18 University of Regina. Approximately 400 students stopped at the SMA booth to participate in activities and pick up career information.



RCSD Career Day at Miller High School, Regina

- **Career Fairs and Community Events**

- Education Outreach attended career fairs located in Regina, Saskatoon and Balgonie. Discussions about careers in the mining industry occurred with over 950 students.
- Western Potash Open House April 11 (Kronau). Met with about 70 members of the surrounding community who came to ask questions and learn about potash mining in the area.
- Let's Talk Science, "Science Rendezvous" community event for families May 13 (U of S, Saskatoon). SMA provided eight MAP activities to augment the hands-on activities display organized by Donna Beneteau and the Department of Civil and Geological Engineering. Approximately 150 people attended.

- **Family Safety Zone** – hands-on activities for visitors attending the SMA Emergency Response/Mine Rescue Skills Competition. Approximately 90



children and 150 adults visited the FSZ and participated in hands-on educational activities related to Saskatchewan's mining industry.

### 1.3. Government Outreach

The SMA regularly engages with elected provincial and federal members and Ministry officials to support advocacy efforts. Our efforts are data-informed and we provide recommendations to issues. Copies of presentations made to Government members can be accessed by contacting the President.

#### • Federal Government Outreach

- SMA President toured MP Georgina Jolibois around PDAC Trade Show to meet with SMA member companies.
- SMA President and Vice President participated in Energy Council of Canada/NRCan Conference in Regina on Multiple Pathways to Clean Energy, including meeting with NRCan Parliamentary Secretary Kim Rudd.
- SMA President and Chair participated in the Governor General's Canadian Leadership Conference hosted by the Regina Chamber of Commerce.
- SMA President attended the Annual Energy and Mines Ministers Conference as part of Canadian Mineral Industry Federation (CMIF) in August. The CMIF submission identified six policy areas to improve Canada's investment attraction. The submission is available at the SMA office.
- SMA President participated in MAC Mining Day on the Hill in November and met with various MP's and senior government officials.
- SMA President and Board members met with Honorable Ralph Goodale, Minister of Public Safety and Honorable Jim Carr, Minister of NRCan in November to discuss mining sector and impacts from Climate Change/Carbon Tax, CEAA 2016 reform and legalization of marijuana.
- SMA President made a pre-budget submission to the House of Commons Standing Committee on Finance in May.
- SMA President, Vice President and Board Members met with Honorable Catherine McKenna, Minister of ECCC and Honorable Dustin Duncan, Minister of Environment in September to discuss proposed CEAA 2016 reforms.

#### • Provincial Government Outreach

- Saskatchewan Mining Week launch at the Provincial legislature – a number of elected officials including Ministers participated at the Mining Week Launch and Lunch.

- SMA President, VP and Board members met with Minister Duncan. Discussion topics included State of the Nation Outlook, Overview of new SMA Strat Plan, CEAA Review, Climate Change/Carbon Tax, Species at Risk, Social License & Indigenous Relationships, Results of Public Support Survey and Mining Supply Chain Sector Study.
- SMA President, VP and Board also met with NDP Caucus including Trent Wotherspoon, Buckley Belanger, Carla Beck and Warren McCall to discuss key files.
- SMA President and Board met with Honourable Scott Moe, Minister of Environment in September to discuss Saskatchewan Climate Change strategy.
- Lunch meeting with SMA Board and SK Party Leadership Candidates Scott Moe, Gord Wyant, Ken Cheveldayoff and Tina Beaudry Mellor.
- Mining Roundtable with Honourable Nancy Heppner, Minister of Energy & Resources, Honourable Don Morgan, Minister of LRWS, Honourable Dustin Duncan, Minister of Environment and SMA Board of Directors, December 6.
- Christmas Reception - The Christmas Reception was held at the Hotel Saskatchewan on December 6 providing an opportunity for SMA members to network with elected officials and senior civil servants. Over 80 guests attended and interacted with SMA Board and committee members.
- Saskatchewan Reception – Prospectors and Developers Association Convention (PDAC). SMA Exploration Section cohost this reception at PDAC in Toronto with the Ministry of Economy to celebrate the current and past successes of the Saskatchewan exploration community with alumni.



SMA Christmas Reception

- SMA President and members of the Exploration Committee met with Honorable Steve Bonk, Minister of Economy and DM Pushor in November and expressed concerns related to removal of PST exemption on drilling activities, and the MARS tenure system.

#### 1.4 Member Outreach

- **Annual General Meeting** - the 51st AGM was held on Friday, March 3, 2017 at the Radisson Hotel in Saskatoon. 135 SMA members attended the AGM and 185 people attended the President's Banquet and Awards Gala.
- **Membership** – In 2017, there were 49 member companies of the Association.
- **SMA E-News Bulletin** - SMA provided quarterly E-Newsletters designed to keep members informed of SMA activities.



51st Annual General Meeting

## 2. Advance Indigenous Participation

- 2.1 **Navigating the Mining Industry Supply Chain** was held April 4th, 2017 prior to the Mining Supply Chain Forum at Prairieland Park, Saskatoon. The goal is to increase the participation of aboriginal businesses in the mining supply chain. The event is focused on bringing together “business-ready” aboriginal businesses and non-aboriginal businesses that are looking to develop a business relationship with aboriginal entities. The forum included 90 registrants. Presentations included a panel on the ‘Path of the Aboriginal Entrepreneur’ and a panel on ‘Financing Opportunities’.



Panel of the Aboriginal Entrepreneur with 4Souls Cleaning, STC Industrial and Power Chief Scaffolding

- 2.2 **Presentation to Touchwood Agency Tribal Council - Muskowekwan.** SMA President presented an overview of Mining in SK at the Touchwood Agency Tribal Council Mining Business

Forum on the Muskowekwan First Nation in late April prior to panel presentations from Mosaic Yancoal, BHP and Encanto Potash.

- 2.3 The SMA submitted two final proposals for funding to IMII under the Diversity and Inclusion Program.

- Junior & Indigenous Youth First Responders Boot Camp
- Indigenization of Mineral Resource K-12 Lesson Plans & Pilot Camps

## 3. Enhance Capacity and Efficiency of Saskatchewan Mining Supply Chain Sector

- **Mining Supply Chain Forum** - The 9th Annual **Saskatchewan Mining Supply Chain Forum**, hosted by the SMA, Ministry of the Economy and SIMSA was held April 5 at Prairieland Park in Saskatoon. The purpose of the event is to increase awareness of current mining projects in Saskatchewan and the related supply chain opportunities for manufacturing companies. The event had over **1100 participants** in attendance with 200+ exhibitors including outside displays. The Mining Supply Chain Forum is an important revenue generator for SMA. More information on the Forum including the agenda and presentations at <http://saskmining.ca/Mines-in-Saskatchewan/Saskatchewan-Mining-Supply-Chain%20-Forum>

## 4. **Organizational Effectiveness**

During the year the PAC developed a Communications Strategy to support PAC initiatives.

The SMA Public Awareness Committee met 4 times in 2017.

### **2017 SMA PAC Committee Members:**

Veronique Loewen, AREVA Resources Canada  
 Carey Hyndman, Cameco Corporation  
 Tyler Dunn, Nutrien  
 Tyler Hopson The Mosaic Company  
 Marnel Jones, The Mosaic Company  
 Stacey Doolan, Nutrien  
 Maeghan Dubois, K+S Potash Canada  
 Sydney Gossard, K+S Potash Canada  
 Scott Greening, Westmoreland Coal Company, Estevan Mine  
 SMA Support – Tracey Irwin, Pam Schwann

Respectfully submitted,  
 Tyler Dunn  
 Chair, Public Awareness Committee

# Safety Committee

Chair: Tracy Welder  
Nutrien Lanigan

It was once again my privilege to work with a highly functional, very dedicated, and active committee. The dedication, openness in sharing common issues and best practice solutions, the safety committee is committed to the task of being a strong resource, supporter & promoter of safe mining. The SMA Safety Committee met for 10 meetings throughout 2017, alternating meeting locations between Saskatoon, Regina and Moose Jaw. The following is an action progress report for 2017.

## Special acknowledgement to:

**Doug Poole-** Doug passed away this fall after a brief but courageous battle against a serious illness.

**Guy Hiltz** – Guy has taken a job south of the border with his company.

These individuals were not only an integral part of the safety committee, but also involved in many various sub committees. To say that they will be missed is an understatement, words cannot describe the contributions, dedication that these two individuals made to our committees, training programs, competitions, and public education programs. These two individuals were more than just committee members, they were colleagues, mentors, and a huge part of our safety committee family.

## 1. Advance safety and environmental stewardship

- Continue to offer SMA Supervisor training
  - ◊ A total of 4 training courses are available for both new and experienced supervisors. These are offered throughout the year and at alternating locations to cover the needs of all mine sites. Over 1500 participants have now completed the L1 Industrial Supervisor Safety Course.
- Safety Committee Professional Development sub-committee explored opportunities to provide safety training workshops for SMA member safety professionals.
  - ◊ In conjunction with the SMA Geotechnical Committee, a “Safety Summit – Technical Aspects of Safety” was held on March 2, 2017. This 2<sup>nd</sup> annual all day event featured presentations on a variety of safety topics. The focus is on Serious Injury and Fatality prevention.
- Continued development of contractor safety training
  - ◊ Now partnered with Saskatchewan Polytechnic (formerly SIAST) the SMA Safety Training Consortium (SMASSTC) has completed course development for a number of courses including the General Mine Safety Awareness course. The goal is to install minimum safety awareness training requirements for all contractors working at SMA member sites in the province.

- ◊ Subject matter experts, supplied by mines in the province, worked with staff at Saskatchewan Polytechnic to ensure course content matches the needs for mine specific safety awareness.
- ◊ The sub-committee continues to meet with contractor associations to discuss issues of common interest and to communicate expectations.
- ◊ Implementation dates will vary based on the needs of individual SMA companies with PotashCorp and Mosaic providing specific requirements for implementation on ISNetworld in 2017.
- ◊ The link to the General Mine Safety Awareness Course is <http://saskpolytech.ca/programs-and-courses/part-time-studies/course/general-mine-safety-awareness/CE-4302/>

- The SAFE Committee proposed and received approval from the SMA Executive in 2015 to share Dangerous Occurrence Reports (both initial and final) between SMA members using a member-controlled distribution list. Dangerous Occurrence report sharing began on January 1, 2016.

- ◊ In 2017 there were a total of 101 reports shared including:

- 90 initial reports
- 11 final reports

Categorized using SMA "Cause of Injury"	
Struck against	3
Struck by	23
Fall to lower level	2
Fall to same level	0
Caught in	0
Caught on	0
Caught between	4
Contact with	57
Overstress, overexertion, overload	0
Other	9
<b>Total</b>	<b>98</b>

Categorized using Type of Incident	
Electrical	51
Mobile Equipment	6
Fall	2
Line of fire	18
Dropped Object	6
Chemical Exposure	3
Lockout/Tag Out	0
Fire/Explosion	12
<b>Total</b>	<b>98</b>

- Maintain an engaged and effective committee with valuable meeting content
  - ◊ Safety Alert shares by committee members
  - ◊ Incident and High Potential incident/near miss reviews by committee members



- ◇ Report outs by sub committees – Competition committee, Contractor Safety Training committee, Industrial Hygiene Focus Group, Serious Accident and Fatality Elimination Committee, Supervisor Training Committee and Professional Development Committee.
- ◇ Quarterly reviews of SMA injury statistics

## 2. **Enhance Public Awareness and Support**

- Continue the Emergency Response/Mine Rescue Skills Competition and maintain event quality and enhance where possible.
  - ◇ The 49<sup>th</sup> Annual ER/MR Skills Competition was held in Saskatoon on June 3, 2017. There were 15 highly skilled teams competing this year (9 underground and 6 surface teams).
  - ◇ The Family Safety Zone entertained the young and young at heart with activities including those provided by the Work Safe Saskatchewan – Street Team.
  - ◇ Media interviews, articles and billboard ads once again increased the profile of this world class competition.
  - ◇ The competition newsletter “The Scoop” was once again produced.



Family Safety Zone at the 49th Annual Emergency Response Mine Rescue Skills Competition in Saskatoon

## 3. **Inform Regulatory and Policy Frameworks**

- The Ministry of Labour Relations & Workplace Safety initiated consultation on proposed revisions to *The Mines Regulations*, 2003 in 2015 and the SMA Safety Committee continued to be engaged in 2016 and 2017 through participation in a number of meetings of the committee and subcommittees including those with LRWS/MSU and through the submission of detailed comments by the SMA.
- The Ministry has indicated an interest in having the proposed changes to *The Saskatchewan Gazette* in Q2 2018.

- In 2017 the SMA Safety Committee and the Chief Mines Inspector reviewed and updated *The Saskatchewan Mining Association (SMA) Injury Reporting Requirements* to reflect the current expectations around the reporting of injuries to the Ministry and to the SMA. The link to the new requirements is [http://saskmining.ca/ckfinder/userfiles/files/Revised%20Guide%20to%20SMA%20Injury%20Reporting%20Version%203%20January%2017%2C%202017\\_final.pdf](http://saskmining.ca/ckfinder/userfiles/files/Revised%20Guide%20to%20SMA%20Injury%20Reporting%20Version%203%20January%2017%2C%202017_final.pdf)
- The Emergency Response/Mine Rescue sub-committee also worked with the Mines Safety Unit to review and update the *Saskatchewan Mine Rescue Manual*. This is an important reference document for our mine rescue teams to understand how to respond to emergencies in our mines. The link to the manual is [http://saskmining.ca/ckfinder/userfiles/files/Mine%20Rescue%20Manual%202017%20Update%20%2011%20January%202018\(1\).pdf](http://saskmining.ca/ckfinder/userfiles/files/Mine%20Rescue%20Manual%202017%20Update%20%2011%20January%202018(1).pdf)

## 2017 Statistics and Achievements

### **Achievements**

The total exposure hours for reporting member companies indicated a significant (6.08%) decrease from 16,430,228 in 2016 to 15,430,631 in 2017.

The SMA annually recognizes member companies that realized an injury rating of zero. This is a significant milestone. The SMA rating is achieved by a calculation of Lost Time Injury (LTI) and Modified Work Injury (MWI) frequency rate plus 10% of the LTI and MWI severity rate.

In order to be eligible for a SMA Safety Award a non-producing site or associate member may not have a lower number of exposure hours than the producing site with the lowest exposure hours for the reporting year. For this purpose “producing” means sites operating open pit, underground or solution mines as well as sites which are operating mills.

The following companies are presented with a 2017 SMA Safety Award: Hours worked are identified in brackets

1. Mosaic Potash – Esterhazy K1 (894,620 hours)

Operations with a SMA rating lower than both the median SMA rating for that year and the previous seven year average median, are also recognized for their Safety Achievement. In 2017, the median was 5.21 and the previous 7 year average median was 1.82. Companies that met this criteria are:

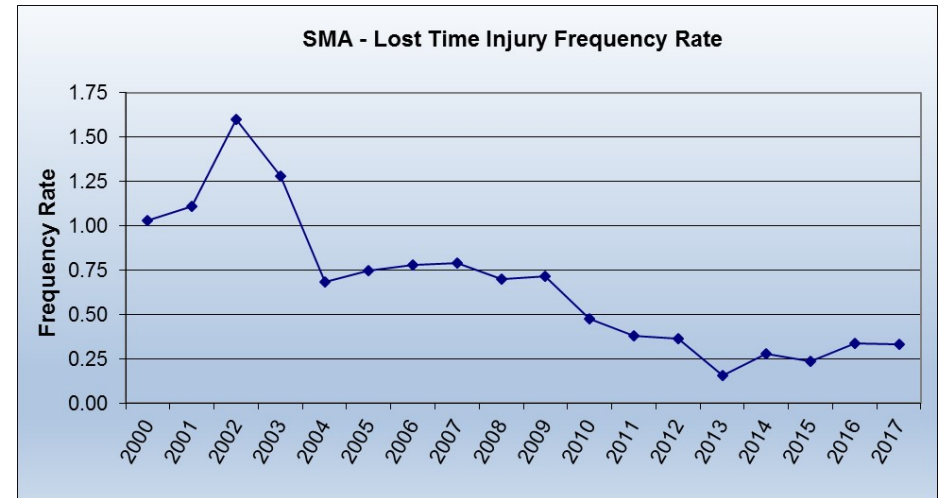
1. Cameco Corporation – Cigar Lake (630,139 hours)
2. K+S Potash Canada - Bethune (766,002 hours)
3. BHP – Jansen (54,813 hours)
4. Boart Longyear (71,770 hours)

### John T. Ryan Awards National Select Category

Mosaic's Belle Plaine was awarded the National John T. Ryan Safety Trophy for National Select Mines. With the achievement of 695,271 hours worked during 2016, the Belle Plaine mine had a reportable injury rate of 0, which was tied for the best among National Select mines in Canada. This also marks the second time that the Belle Plaine mine was recognized by the John T. Ryan National committee. In 2012 the Belle Plaine mine received the Regional Select Mines award. Outstanding performance!

The positive achievements with injury prevention and work place safety in the Saskatchewan Mining Industry are reflected in both the graph below and statistics from the Workers' Compensation Board (WCB). Although the graph below indicates a slight increase in the Lost Time Injury rate from 2013 to 2017 the Saskatchewan mining industry remains a leader in safety performance as shown by Workers' Compensation Board premiums. There were no fatalities at a Saskatchewan mine in 2017.

The WCB 2018 Premium Rates recorded the eleventh consecutive decrease in the average premium rate. The 2018 Premium Effective Rate, which reflects injury rate and duration, for all industries is \$1.19 (per \$100 payroll). The 2018 Premium Rate for all Mining Specific Codes, is lower than the "all industry" rate, reflecting the mining sectors' lower injury rate and duration. Specific mining code rates are \$0.65 for Open Pit Mines (D71); \$0.71 for Underground Soft Rock (D72); \$0.79 for Underground Hard Rock (D73) and \$0.45 for Solution Mines (M31). (Source WCB 2018 Assessment Rate – Classification of Industries).



### 2017 Emergency Response/Mine rescue Skills Competition

The 49<sup>th</sup> Annual ER/MR Skills Competition was held at Prairieland Park in Saskatoon on June 3, 2017. There were 15 highly skilled teams competing this year. There were 9 teams in the Underground category and 6 in the Surface category. This event provides teams an opportunity to showcase their skills under the pressure of competing among their peers. Five separate events test the knowledge, skill and team work it takes to bring an emergency to a successful & safe conclusion. Simulated Underground or Surface problems, Fire Fighting, first aid, Proficiency & Practical Skills bring out the best in our competitors and we are so proud of each and every one of them. The committee would like to thank the mining company's management groups, who continue to support this event. A big thank you also to the event coordinators and representatives from the sites who devote significant time and effort to ensure a successful competition.

The 2017 Winners and Runner Up teams are as follows:

#### 1. OVERALL EVENT

Surface Winner	PotashCorp Patience Lake
Surface Runner Up	Cameco Key Lake
Underground Winner	Mosaic Esterhazy K1
Underground Runner Up	PotashCorp Lanigan

## 2. INDIVIDUAL EVENTS

### A. FIRST AID

Surface Winner	PotashCorp Patience Lake
Surface Runner Up	Westmoreland Coal Poplar River

Underground Winner	PotashCorp Lanigan
Underground Runner Up	Mosaic Esterhazy K2

### B. FIRE FIGHTING

Surface Winner	AREVA McClean Lake
Surface Runner Up	Mosaic Belle Plaine

Underground Winner	PotashCorp Allan
Underground Runner Up	Silver Standard Seabee

### C. PROFICIENCY

Surface Winner	Westmoreland Coal Poplar River
Surface Runner Up	PotashCorp Patience Lake

Underground Winner	PotashCorp Lanigan
Underground Runner Up	Mosaic Esterhazy K1

### D. PRACTICAL SKILLS

Surface Winner	Mosaic Belle Plaine
Surface Runner Up	Cameco Key Lake

Underground Winner	Mosaic Esterhazy K1
Underground Runner Up	PotashCorp Allan

### E. SURFACE FIELD PROBLEM

Surface Winner	Cameco Key Lake
Surface Runner Up	Mosaic Belle Plaine

### F. UNDERGROUND MINE PROBLEM

Underground Winner	PotashCorp Rocanville
Underground Runner Up	Mosaic Esterhazy K1

## **Emergency Response Persons of the Year**

The individuals recognized at the 2017 Awards banquet for their long standing dedication to Emergency Response and Mine Rescue were Calvin Petracek and Eugene Mann. Retired members of Emergency Response Mine Rescue Teams were also recognized at the Awards Banquet.

Calvin Petracek has worked at PotashCorp Rocanville Division for 33 years and has been involved in Emergency Response as an active member for over 26 years. Calvin also holds the Deputy Fire Chief position in his local community volunteer fire department.



Jessica Theriault, SMA Chair, congratulates Calvin Petracek, Emergency Response Person of the Year

Eugene Mann worked at the Cameco McArthur River Operation and began his involvement in mine rescue in 1983. Eugene was very active in mine rescue as a member, coordinator, captain and instructor.



Jessica Theriault, SMA Chair, congratulates Eugene Mann, Emergency Response Person of the Year



The following are the 2017 SMA injury statistics.

2017 YEAR END INJURY STATISTICS REPORT					
	Number	Days	Frequency Rate	Severity	SMA Rating Median **
DART *	85	3172	1.10	41.11	5.21

	Number	Frequency Rate	Percentage
First Aid	769	9.97	84.41
Medical Incident	57	0.74	6.26
Modified Work Injury	59	0.76	6.48
Lost Time Injury	26	0.34	2.85
Total Injuries	904		

	Number	Severity Rate
Modified Work Days	1948	25.25
Days Lost	1224	15.86

Body Parts	Number	Frequency Rate	Percentage
Head	10	0.13	7.04
Eye	8	0.10	5.63
Upper Limb	55	0.71	38.73
Torso	11	0.14	7.75
Back	26	0.34	18.31
Lower Limb	32	0.41	22.54

\* DART- Days Away, Restricted or Transferred

\*\*SMA Rating -(Year to Date DART Injury Rate) + (10% Year to Date DART Severity Rate)

Accident Sources	Number	Frequency Rate	Percentage
Struck Against	12	0.16	8.45
Struck By	27	0.35	19.01
Fall to Lower Level	7	0.09	4.93
Fall to Same Level	11	0.14	7.75
Caught In	3	0.04	2.11
Caught On	0	0.00	0.00
Caught Between	19	0.25	13.38
Contact With	10	0.13	7.04
Overstress, Overexertion, Overload	37	0.48	26.06
Other	16	0.21	11.27

Department Work Area	Number	Frequency Rate	Percentage
Production	92	1.19	64.79
Maintenance	43	0.56	30.28
Administration	1	0.01	0.70
Other	6	0.08	4.23

Total Exposure Hours	15,430,631
Total Number of Employees	7,882

## Acknowledgements

### The 2017 Safety Committee Executive consisted of

Chairperson: Tracy Welder, Nutrien Lanigan  
 Vice Chairperson: Mark Sherwood, Cameco  
 Recording Secretary: Wes Hrapchak, Nutrien Allan

### Safety Sub Committee chairs:

Competition committee – Chris Stansfield, AREVA McClean Lake  
 Supervisor Training committee Mark Sterner, Mosaic Colonsay  
 SMASTC committee (Contractor Safety Training) – James Baumgartner, Mosaic  
 SAFE committee (Serious Accident & Fatality Elimination) – Mark Sherwood, Cameco  
 Industrial Hygiene committee – Navid Taherdin, AREVA  
 Professional Development committee – Dave Speerbrecker, Thyssen Mining  
 Mine Safety Summit Steering committee - Arnfinn Prugger, Nutrien

A special thank you to Brad, Pam, Dorian and Tracey of the SMA office for your continued support and assistance.

Respectfully submitted  
 Tracy Welder  
 Chair, Safety Committee



Surface Fire Fighting event at 49th ERMR Competition



Underground Mine Problem event at 49th ERMR Competition

# Finance/Taxation Committee

Chair: Vacant

*The SMA Taxation Committee monitors tax issues of provincial and national importance, advocates for tax changes to enhance industry competitiveness and serves as a useful network for members to exchange information on tax and fiscal issues.*

The Taxation Committees activities relate to the SMA Core Strategy of Inform Regulatory and Policy Frameworks. Royalty related discussions are sector specific, and are typically not discussed by this committee. The Committee did not meet as a whole in 2017, however members were provided information updates with respect to federal and provincial budgets and directly engaged on other issues. Some of the financial issues identified below were addressed by ad hoc committees of the SMA.

## Provincial Budget

The Provincial budget documents are available at: <http://www.finance.gov.sk.ca/budget17-18/2017-18Budget.pdf>

**Revenue - \$14.17 B**

**Expense - \$14.8 B**

**(Deficit) (-\$685 M)**

Key items in the Provincial Budget were:

- Focus on reducing reliance on resource revenues to fund government operations and moving towards increased consumption taxes but decreased personal and corporate taxes.
- No direct changes to provincial royalty structure for minerals
- Increase of PST to from 5% to 6% and expansion of PST base.
- Expansion of PST base which **removed** the PST exemptions for:
  - Drilling activities
  - All construction (Real Property Contracts – anticipated revenue - \$344M)
  - Permanently mounted equipment for oil, gas & potash. (anticipated revenue - \$16.7 M)
- General Corporate Income tax rate declined in half point increments from July 2017 - July 2019. (from 12 – 11%)

## Federal Budget

The Federal Budget documents are available at: <http://www.budget.gc.ca/2017/docs/bb/brief-bref-en.html>

**Revenues: \$304.7B**

**Expenses: \$330.2 B**

**Deficit: \$ -28.5B**

The Federal Budget included funds for the following commitments: Infrastructure Bank , National Trade Corridor, Renewal of the Mineral Exploration Tax Credit, extension to ASETS and Employment and Skills Training, Clean Technology investments in the Natural Resources Sector, and a \$1 B investment in regional supercluster initiatives over 4 years.

In addition to budget information the Taxation/Finance committee was provided information related to SaskPower's Rate Application proposal for a 5% increase, the SMA Response, the Rate Review Panel response and ultimately the response from government which approved a 3.5% increase effective March 1, 2018.

Darwin Collins, The Mosaic Company, was appointed as the SMA representative on the Saskatchewan Assessment Management Association (SAMA) Commercial Advisory Committee.

The SMA President made a submission to the House of Commons Standing Committee on Finance in October. The President noted that the SMA submission was the only presentation not requesting money from government, but was capable of generating revenue. The SMA submission focused on improving the regulatory framework to enable sustainable mineral resource development.

The Saskatchewan mining industry is concerned about the cumulative impacts of continually increasing costs from government related to direct taxation and regulatory processes (carbon pricing/tax, clean fuel standard, municipal tax, power rates etc.), particularly in an environment of sustained low commodity prices where these increases cannot be passed on to buyers and competitors aren't facing similar burdens.

Respectfully submitted,  
Pamela L. Schwann, President

# Appendix I - PERFORMANCE REPORTING:

## 2017 Activities in Support of the SMA Strategic Plan

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### **Mission Statement:**

*Advance a safe, sustainable and globally competitive exploration and mining industry in Saskatchewan that benefits all residents of the province.*

At the 2016 AGM, the Board of Directors approved a 5 year Strategic Plan, with the vision that Saskatchewan will be recognized as a global mining leader. The ensuing report highlights some of the achievements in 2017 relative to the Strategic Plan Goals. Section and Committee Reports contain additional information and details. Detailed program agendas for events including AGM, Mining Week, and Mining Supply Chain Forum are available on the SMA website at [saskmining.ca](http://saskmining.ca)

### **Goal 1: Advance Safety and Environmental Stewardship**

- **Industrial Supervisor Safety Course** – A total of 4 training courses are available for both new and experienced supervisors. These are offered throughout the year and at alternating locations to cover the needs of all mine sites. Over 1500 participants have now completed L1 Industrial Supervisor Safety Course.
- **Standardized Safety Contractor Training Course** – partnered with Saskatchewan Polytechnic the SMA Safety Training Consortium (SMATC) has completed course development for a number of courses including the General Mine Safety Awareness course. The goal is to install minimum safety awareness training requirements for all contractors working at SMA member sites in the province.
- **Emergency Response Mine Rescue Competition (ERMRC) – First Aid & Fire Train the Trainer Courses** – SMA coordinated the First Aid Train the Trainer and Fire Train the Trainer sessions in advance of the ERMRC.
- **49<sup>th</sup> Annual Emergency Response Mine Rescue Competition** – was held in Saskatoon on Saturday June 3. 15 teams (9 underground and 6 surface) competed. Mosaic Esterhazy K1 was the Overall Underground Winner and PotashCorp Patience Lake was the Surface Overall Winner.
- **Emergency Response Mine Rescue Newsletter – “The Scoop”** – the 3rd edition, detailing Competition Events, Teams, Results and Personnel was issued in June.
- **Serious Accident and Fatality Elimination (SAFE) Committee** - the SAFE committee is continuing to share pertinent information from Dangerous Occurrence Reports (both initial and final) between SMA members using a member-controlled distribution list. In 2017 there were a total of 101 reports shared including 90 initial reports and 11 final reports.

- **Mine Safety Summit** - in conjunction with the SMA Geotechnical Committee, the “2nd Annual Safety Summit – Technical Aspects of Safety” was held on March 2, 2017. This event featured presentations focussed on Serious Injury and Fatality prevention.
- **John T. Ryan Award** –SMA coordinated, received and reviewed provincial submissions for national John T Ryan Safety Awards. Mosaic Belle Plaine was awarded the National John T. Ryan Safety Trophy for National Select Mines. This marks the second time that Mosaic Belle Plaine was recognized by the John T. Ryan National committee. In 2012, Mosaic Belle Plaine received the Regional Select Mines award.

### **Goal 2: Enhance Public Awareness and Support**

#### **1. Public Outreach**

- **ORE** – the official magazine of the SMA was distributed twice in 2017 (April/May and Nov/Dec), with a distribution of over 23,000 each issue. ORE is another net revenue generator for the SMA in 2017. ORE is available at this link: <http://saskmining.ca/Mines-in-Saskatchewan/ORE-Magazine>
- **SMA Website Renewal** – SMA’s new website was officially unveiled in May and received over 14,000 visits throughout the year.
- **Social Media** - The SMA twitter account @SaskMining Assoc continues to be used to enhance public communication of SMA activities and member news. The account has over 1900 followers. SMA also has a Facebook page which is linked with twitter and the page has over 350 likes and followers. Instagram is another social media that is used primarily for education outreach.
- **Saskatchewan Mining Week** –May 28 - June 3, 2017 **Theme: - “Mining in Transformational Times”**. Various events were held throughout the province during Mining Week including:
  - **Monday, May 29** - Media Conference at the Saskatchewan Legislature in Regina hosted by SMA Chair, Jessica Theriault and Hon. Dustin Duncan, Minister of Energy & Resources.
  - **Tuesday, May 30** – Sunil Kansal, Senior Manager in Strategy and Operations, Deloitte presented to members of APEGS and SK Chamber of Commerce (Regina).
  - **Wednesday, May 31** – Andrew Swart, Global Consulting Mining Leader, Deloitte presented to members of the Greater Saskatoon Chamber of Commerce (Saskatoon).
  - **Wednesday, May 31** – Alicia Woods, General Manager, Marcotte Mining and creator of Covergalls Workwear presented to WIM/ WiN (Saskatoon).

- **Wednesday, May 31** – MLT Aikins hosted a full day workshop on *Medical & Recreational Marijuana in the Workplace* (Saskatoon).
- **Thursday, June 1** – MLT Aikins hosted a full day workshop on *Medical & Recreational Marijuana in the Workplace* (Regina).
- **Thursday, June 1** – International Minerals Innovation Institute (IMII) presented the 4<sup>th</sup> Annual *Let's Talk Minerals* (Saskatoon).
- **Saturday, June 3:** Emergency Response Mine Rescue Competition (Saskatoon).

**2. Education Outreach Program** – In 2017 the SMA Education Outreach Programs had over 2400 students and educators directly involved in SMA events and workshops. SMA Education Outreach Programs target the Ministry of Education's primary and secondary science renewal, and opportunities to introduce mining-related lesson plans and resources that are linked to these new curricula. The 2017 Education Outreach Program consisted of:

**A. Workshops and Career Fairs** – Ed Outreach Coordinator participated in the following:

- Regina Teacher's Convention Tradeshow (50 teachers)
- RCSD Career Day (Regina)
- Northern Area Teachers Association (Prince Albert)
- STEAM event at the Canada Wide Science Festival, University of Regina (400 students)
- Career fairs in Regina, Saskatoon and Balgonie (950 students)
- Western Potash Open House April 11 in Kronau. (70 members of the surrounding community).
- Let's Talk Science, "Science Rendezvous" community event for families at U of S, Saskatoon (150 people)

**B. Minerals and Products (MAP) - La Loche** April 24 and 25, 2017. The event showcased six main stages of the mining cycle – *Exploration, Mining, Processing, Products, Sustainability, and Safety*. 196 students and 22 teachers from La Loche Community School (Dene High and Ducharme Elementary), Clearwater River Dene Nation School, and the Northlands College Tri-Trades experienced hands-on activities and interactive demonstrations as they proceeded through the six pavilions.

**C. SMA GeoVenture Teachers Program** – 17 teachers benefited from this fantastic program, August 14 - 19. Site visits to K+S Potash Bethune Mine, Castle Butte Geology Section, Westmoreland Coal Poplar River, Potash Interpretive Centre Nutrien Rocanville Scissors Creek and Cameco's McArthur River Mine. Read their perspective @ <http://saskmining.ca/Mines-in-Saskatchewan/GeoVenture-Blog-Details/2017-SMA-GeoVenture>

- D. ERMRC - Family Safety Zone** - this popular area provides families at the ERMRC a way to explore hands on, mining-related educational and safety awareness activities during the Competition.
- E. M4S (Mining 4 Society)** SMA and Saskatoon Industry Education Council hosted M4S in conjunction with CIM MEMO September 25 & 26, 2017. The event showcased the six main stages of the mining cycle - Exploration, Mining, Processing, Products, Sustainability and Safety. 650 grade 7 students from 25 schools in Saskatoon and surrounding area participated in the event.
- F. Potash Kit Development** –200 kits assembled by Potash Interpretive Centre and over 130 shipped to cover requests.

### 3. Government Outreach

- **Prospectors and Developers Association Convention (PDAC)**  
Through the generous support of SMA Exploration Section companies and "friends" the SMA co-hosted the annual Saskatchewan Reception with the Ministry of Economy. SMA President toured MP Georgina Jolibois around PDAC Trade Show to meet with member companies.
- **Meetings with government officials** - SMA President and Vice President participated in Energy Council of Canada/NRCan Conference in Regina including meeting with NRCan Parliamentary Secretary Kim Rudd; SMA President, VP and Board members met with Minister Duncan to discuss key files; Also met with NDP Caucus including Trent Wotherspoon, Buckley Belanger, Carla Beck and Warren McCall.
- **Mining Week** – Ministers and elected officials attending Mining Week Launch and/or lunch included: Honourable Dustin Duncan, Minister of the Economy; Honourable Dave Marit, Minister of Highways and Infrastructure; Honourable Ken Cheveldayoff, Minister of Parks, Culture and Sport; Lori Carr, MLA Estevan; Trent Wotherspoon, Leader of the Opposition.
- **Emergency Response Mine Rescue Competition (ERMRC)**- the Honourable Ken Cheveldayoff, Minister of Parks, Culture and Sport participated at the ERMRC Awards Banquet.
- **Energy and Mines Ministers Conference 2017** - SMA President attended the Annual Energy and Mines Ministers Conference (August 13 - 15) as part of Canadian Mineral Industry Federation (CMIF). The CMIF submission identified six policy areas to improve Canada's investment attraction.
- SMA President participated in MAC Mining Day on the Hill in November and met with various MP's and senior government officials
- SMA President and Board members met with Honorable Ralph Goodale, Minister of Public Safety and Honourable Jim Carr, Minister of NRCan in November to discuss mining sector and impacts from Climate Change/ Carbon Tax, CEAA 2016 reform and legalization of marijuana.



- SMA President made a pre-budget submission to the House of Commons Standing Committee on Finance in October.
- SMA President, Vice President and Board Members met with Honourable Catherine McKenna, Minister of ECCC and Honourable Dustin Duncan, Minister of Environment in September to discuss proposed CEAA 2016 reforms.
- **Meeting with SK Party Leadership Candidates** - SMA Board met with Scott Moe, Gord Wyant, Ken Cheveldayoff and Tina Beaudry Mellor.
- **6th Annual Mining Roundtable** - Hon. Nancy Heppner, Minister of Energy & Resources, Hon. Don Morgan, Minister of LRWS and Hon. Dustin Duncan, Minister of Environment with SMA Board of Directors, December 6.
- **SMA Christmas Reception** - various Ministers and other elected officials, senior government officials joined the SMA Board of Directors and Members at this annual social event.

#### 4. Member Outreach

- **AGM** - the 51st AGM was held on Friday March 3 in Saskatoon. 135 SMA members attended the AGM and 185 people attended the President's Banquet and Awards Gala.
- **SMA E-News Bulletin** - SMA provided quarterly E-Newsletters designed to keep members informed of SMA activities
- **Membership** – In 2017, there were 49 member companies of the Association.

### Goal 3: Inform Regulatory and Policy Frameworks

#### Federal Relations

- **Species at Risk** - The SMA SARA Working Group, SMA Exploration/ SMEGAC and the MAC SARA Task Force were actively engaged with provincial and federal counterparts.
  - SMA provided a response to ECCC on the proposed woodland caribou Action Plan released by ECCC on July 27.
- **Canadian Environmental Assessment Act, 2012 - 2016-17 Review**
  - SMA VP met with CEAA, MAC and select industry representatives to discuss the Expert Panel Report (April 20).
  - Federal government released their "Environmental & Regulatory Reviews Discussion Paper" (June 29) SMA met with both federal and provincial officials Ministers Duncan and McKenna to discuss concerns.

#### Federal Carbon Pricing Backstop

- Federal government released its "Technical Paper on the Federal Carbon Pricing Backstop" for public comment (May 18). SMA provided response and met with Minister McKenna and senior officials from ECCC and CEAA to discuss proposed federal carbon pricing backstop and proposed changes to CEAA
- **Greenhouse Gas Emissions Reporting Program**
  - Federal government released for public comment (May 5) proposed changes to the Greenhouse Gas Emissions Reporting Program (GHGRP). Major change for SMA members would be the reduction in the reporting threshold from 50 kt CO<sub>2</sub>e to 10 kt CO<sub>2</sub>e. SMA responded June 26 opposing this proposed change.
- **Federal Clean Fuel Standard**
  - Federal government released for comment (Feb 24) the discussion paper on Clean Fuel Standards (CFS). Consultations with stakeholders was undertaken in order to develop a regulation under the Canadian Environmental Protection Act, 1999 to reduce Canada's greenhouse gas (GHG) emissions through the increased use of lower carbon fuels and alternative technologies. SMA's response suggests an incentive-based approach to help encourage movement to lower carbon fuels.
- **Metal Mining Effluent Regulations** - SMA responded to ECCC (July 10) regarding the proposed Regulations Amending the MMER published in May 2017.
- **Coal Effluent Regulations** - ECCC released for public comment (Nov. 10) the second discussion paper related to proposed new Coal Effluent Regulations. SMA and Westmoreland arranged a tour of Poplar River Coal mine (Nov. 15) for ECCC reps to foster a better understanding of prairie coal mining operations.
- **Fisheries Act** - SMA provided a letter to Fisheries and Oceans Canada (August 25) expressing support for the current Act and recommending a number of changes with respect to operational practices and internal support systems.
- **Navigation Protection Act** - SMA provided a letter to Transport Canada (August 25) expressing support for the current Act along with other recommendations.

#### Provincial Relations

- **The Mineral Industry Environmental Protection Regulations, 1996** - MoE sent the mining industry correspondence (Nov. 9) related to their "Red Tape review of *The Mineral Industry Environmental Protection Regulations, 1996*". SMA responded (December 13) indicating continued support for the regulations and provided suggestions to further reduce regulatory red tape.

- **The Reclaimed Industrial Sites Act** - SMA sent a letter to MECON (Oct. 20) regarding *The Reclaimed Industrial Sites Regulations* amendment (which included comments on proposed Act amendments). Bill No. 85 was introduced in the Saskatchewan Legislature (Nov. 6) to amend *The Reclaimed Industrial Sites Act*. The amendments are largely based on feedback that MECON has received from the SMA, SMA members and regulators (MoE and CNSC).
- **The Pipelines Act, 1998** - SMA met with senior representatives from the MECON (Jan.18) and submitted a letter regarding proposed amendments to The Pipelines Act, 1998.
- **The Discharge and Discovery Reporting Standard**  
A revised Discharge and Discovery Reporting Standard (2017 Standard) was published (Oct. 6). The 2017 Standard is available at: <http://www.publications.gov.sk.ca/details.cfm?p=80028>
- **Saskatchewan Environmental Quality Guidelines**  
SMA submitted letters (Jan. 9 and May 30) to the MoE regarding proposed amendments to the Saskatchewan Environmental Quality Guidelines. Comments included a reminder for the MoE to work with the Water Security Agency to establish a common set of water quality guidelines for surface waters in Saskatchewan.
- **Saskatchewan Solid Waste Management Strategy**  
SMA submitted a letter (May 26) to the MoE regarding the "Saskatchewan Solid Waste Management Strategy" discussion paper. SMA provided general support for the consultation with a request to conduct more detailed discussion with our industry.
- **Saskatchewan Stack Sampling Manual**  
On July 24 the MoE released for comment their proposed revisions to the "Saskatchewan Stack Sampling Manual". SMA provided a response (Sept.15).
- **Tailings Management**  
A half day tailings management workshop was held with the Q4 Environment Committee meeting. The MAC guidance document "A Guide to the Management of Tailings Facilities, Third Edition" was presented. <http://mining.ca/documents/guide-management-tailings-facilities-third-edition>
- **SMA Environmental Forum**  
Planning is underway for the 3<sup>rd</sup> Biennial SMA Environmental Forum October 17-18, 2018 at the Saskatoon Inn.
- **The Mines Regulations 2003**
  - SMA President met with DM Mike Carr, LRWS (March) for an update on the status of the regulations and feedback regarding SMA outstanding concerns.
  - SMA President sent a letter (May 12) to DM Carr regarding clarification for fire door requirements.

- SMA met with LRWS/MSU (July 31) to discuss remaining issues.
- SMA had a follow up meeting with Minister Morgan regarding concerns including: Installation of Fire Doors, Reporting of Dangerous Occurrences and Safety Equivalency.
- Mineral Administration Registry System (MARS) – the SMA Exploration subcommittee worked with the province to address the issue of fragmentation of land packages and speculative claim staking.
- Saskatchewan Mineral Exploration Government Advisory Committee (SMEGAC) – the SMA Exploration subcommittee addressed various exploration permitting issues including a workable solution related to woodland caribou sightings during exploration.
- SMA Exploration Committee provided recommendations to MEcon on the framework for an incentive program to diversify mineral exploration including reinstatement of PST Exemption for drilling.
- The Potash Section Technical subcommittee provided recommendations to MEcon related to implementing the land sale process for subsurface mineral rights outside of the designated Potash Area.
- The SMA wrote to Honourable Stephen Bonk, MEcon requesting reinstatement of the PST exemption related to mineral exploration drilling.

#### **Goal 4: Cultivate a Diverse, Inclusive and Talented/Skilled Workforce**

- **Saskatchewan Polytechnic** - SMA President participated in SaskPolytechnic BOD meetings (Jan. & March)
- **Scholarships** – the SMA annually sponsors 3 scholarships including 2 Environmental Engineering Scholarships at the U of S and U of R, and 1 Power Engineering Scholarship at Saskatchewan Polytechnic. SMA also sponsored the Yorkton Robotics Team (\$500 + comp. booth at Mining Supply Chain Forum) to assist their participation at the World Skills championship in Germany.
- **Applications to IMII - Diversity and Inclusion Funding Program** - SMA submitted two final proposals for funding to IMII under their Diversity and Inclusion Program with a response anticipated in December 2017. The two multi year proposals related to Indigenization of SMA Lesson Plans and a Youth and Junior First Responders Boot Camp.
- Through the SMA HR Committee, the SMA is also supporting a proposal from WIM/WiN related to mentorship that has also been selected to move to the next phase of project development.
- **World Mining Competition** - SMA President presented an overview of Mining in Saskatchewan to the teams competing in the U of S Mining Competition. The SMA was also a sponsor of this event.

- **WIM/WIN** – the SMA was a sponsor of the WIM/WIN Mine your Potential event in October.
- **IMII** – SMA Chair is on the IMII Board and SMA President is on the Education and Training Panel of IMII.

#### **Goal 5: Advance Indigenous Participation**

- **Navigating the Mining Supply Chain** was held on April 4th in advance of the 9th Annual Mining Supply Chain Forum with over 100 participants. The goal of the event is to promote increased involvement in the mining supply chain by indigenous-owned companies or joint ventures.
- **Mining Supply Chain Forum** - Inclusion of Panel discussion on “Investment Opportunities with Aboriginal Development Corporations”, featuring Athabasca Basin Development Corp; Des Nedhe Developments; File Hills Qu’Appelle Development Corporation and Pinehouse Business North.
- **Presentation to Touchwood Agency Tribal Council - Muskowekwan** - SMA President presented an overview of Mining in SK at the Touchwood Agency Tribal Council Mining Business Forum on the Muskowekwan First Nation.
- **Education Outreach**
  - **Minerals and Products (MAP) LaLoche** April 24 & 25. 196 students and 22 teachers from La Loche Community School (Dene High and Ducharme Elementary), Clearwater River Dene Nation School, and Northlands College Tri-Trades participated in this event showcasing six main stages of the mining cycle– Exploration, Mining, Processing, Products, Sustainability and Safety.
  - **RDIEC “Try a Career”** (Balgonie), Regina Public, Regina Catholic, Prairie Valley and File Hills Qu’Appelle Tribal Council Schools; over 900 Grade 9 students
  - **M4S (Mining4Society)** - In conjunction with CIM MEMO (Sept. 25 & 26) in Saskatoon. Over the two days approximately 650 grade 7 students from 25 schools in the Saskatoon Public, Greater Saskatoon Catholic, Prairie Spirit and Saskatoon Tribal Council areas participated in the event.

#### **Goal 6: Enhance Capacity and Efficiency of Saskatchewan Mining Supply Chain Sector**

- **9th Annual Saskatchewan Mining Supply Chain Forum** - held on April 5 in Saskatoon with over 1000 participants and 200+ exhibitors including outside displays. SMA President presented results of Mining Supply Chain Economic Analysis study. The MSCF has also become an important revenue generator for SMA. More information and forum presentations

available at <http://saskmining.ca/Mines-in-Saskatchewan/Saskatchewan-Mining-Supply-Chain%20-Forum>

- SMA President participated in WESTEST Board Strategic Planning meeting (June 19)

#### **Goal 7: Organizational Effectiveness**

- **Board Meetings** - Jessica Theriault was elected as Chair, and Tammy Van Lambalgen as Vice-Chair. Board Members elected also include Alice Wong, Peter Jackson, Trevor Berg, John Sundquist, Rob Jackson, Andy Thorne, Rick Kusmirski, Jason Tremblay, Eric Cline and Section Chairs Larry Long (Potash), Cameron Chapman (Metallic), Liam Mooney (Uranium), Tom Shaw (Industrial) and Scott McHardy (Exploration). The Board of Directors also approved the new 5 year Strategic Plan and the 2017 Budget.
- **Section Meetings** – Potash ( 2), Uranium (3), Metallic (1), Industrial (1), Exploration (4) + subcommittee meetings.
- **Committee Meetings** – PAC committee (quarterly); HR Committee (quarterly); Safety Committee (monthly plus various subcommittee meetings); Environment (quarterly + subcommittee meetings); Geotechnical (3); Taxation (0).
- Various adhoc committee meetings were held related to the SaskPower Electrical inspections, SaskPower Rate Application, WCB Committee of Review and Subsurface Mineral Tenure Regulations.
- **SMA Membership Directory** – was updated and printed in Fall 2017.
- **Mining Supply Chain Study** - The report was completed in 2016 and full results of the survey was presented at the 2017 Mining Supply Chain Forum. For more information please contact Pam ([pschwann@saskmining.ca](mailto:pschwann@saskmining.ca))
- **Summer Student** - Allyssa Pelletier was hired under the Canada Summer Jobs Program which funded 80% of her salary. She is entering 3rd year SUNTEP (SK Urban Native Teachers Education Program) and was with the SMA from June 21 - August 25, 2017.
- **Single Desk Financial Services** - To optimize revenues, the SMA requested proposal for single desk financial services for the SMA in July 2017. Three institutions submitted proposals which were vetted and subsequently presented to the SMA Audit and Finance committee and the Board. BMO was identified as the provider of single desk financial services for the SMA.
- The SMA Office Manager continues to modernize payment systems as we move away from cheques and toward electronic transfers as our primary form of payment. 13 companies currently pay invoices by EFT.

# APPENDIX - II

## SMA Board of Directors, 2017 (as elected)

### Chair

Ms. Jessica Theriault  
The Mosaic Company

### Vice Chair

Ms. Tammy Van Lambalgen  
AREVA Resources Canada Inc.

### Directors:

Ms. Alice Wong  
Cameco Corporation

Mr. John Sundquist  
Agrium Vanscoy

Mr. Trevor Berg  
PotashCorp Allan

Mr. Peter Jackson  
The Mosaic Company

Mr. Jason Tremblay  
The Mosaic Company

Mr. Eric Cline  
K+S Potash Canada

Mr. Rob Jackson  
PotashCorp Lanigan

Mr. Rick Kusmirski  
Skyharbour Resources Ltd.

Mr. Andy Thorne  
Cameco Corporation

### SECTION CHAIRS

#### Exploration Chair

Mr. Scott McHardy  
Cameo Corporation

#### Industrial Minerals Chair

Mr. Thomas Shaw  
Westmoreland Coal Estevan Mine

#### Metallic Minerals Chair

Mr. Cameron Chapman  
SSR Mining Seabee

#### Potash Chair

Mr. Larry Long  
PotashCorp Rocanville

#### Uranium Chair

Mr. Liam Mooney  
Cameco Corporation

## 2017 SMA Member Companies

Abasca Resources

Agrium Vanscoy

ALX Uranium Corp

AREVA Resources Canada

- AREVA McClean Lake

BHP

Boart Longyear

Cameco Corporation

- Cameco Cigar Lake
- Cameco Key Lake
- Cameco McArthur River
- Cameco Rabbit Lake

CanAlaska Uranium Ltd.

Denison Mines Corp.

Fission 3.0 Corp.

Fission Uranium Corp.

Fortis Mining Engineering & Manufacturing

Forum Uranium Corporation

HudBay Minerals

ISO Energy Ltd.

JCU (Canada) Exploration Co. Ltd.

K+S Potash Canada

K+S Potash Canada Bethune Mine

K+S Windsor Salt

NexGen Energy Ltd.

North Arrow Minerals

North Atlantic Potash

NSC Minerals

PotashCorp

- PotashCorp Allan
- PotashCorp Cory
- PotashCorp Lanigan
- PotashCorp Patience Lake
- PotashCorp Rocanville

Purepoint Uranium Group Inc.

Rio Tinto

Shore Gold Inc.

Skyharbour Resources

SSR Mining

The Mosaic Company

- Mosaic Belle Plaine
- Mosaic Colonsay
- Mosaic Esterhazy K1
- Mosaic Esterhazy K2
- Mosaic Esterhazy K3

Thyssen Mining Construction of Canada Ltd.

UEX Corporation

Western Potash Corp.

Westmoreland Coal Company

- Westmoreland Coal Estevan
- Westmoreland Coal Poplar River

Xtreme Mining

Yancoal Canada Resources Co. Ltd.

### NOTE:

As of January 2, 2018 the merger of PotashCorp and Agrium was completed to form the company Nutrien