ACTIVITY REPORT

2018





MISSION

Promote, support and proactively develop a responsible, committed and innovative Québec mining industry.

VALUES

Membership in the QMA entails compliance with the values of:

- » Respect;
- » Transparency;
- » Responsibility;
- » Teamwork.

VISION

The Québec Mining Association plays a leadership role as a reference for a responsible, innovative and competitive Québec mining industry, within a sustainable development perspective.





IN MEMORY OF ANDRÉ LAVOIE

The year 2018 ended on a sad note when André Lavoie, who had been QMA's director of communications for 23 years, succumbed to illness on December 28. André left his mark on the mining industry through his dedication and his deep

love for the mining sector and the people who work in it. His memory will remain strong for all of us and will become part of the long history of the Québec Mining Association.

KEY ISSUES DEFENDED BY THE QMA IN 2018

Improving the ongoing viability of the mining industry by making Québec more attractive

Reducing the delays and fees imposed by government

Improving the image and relevance of the mining industry

Instituting proceedings before the Administrative Labour Tribunal to obtain authorization for mucking under loaded holes Maintaining relations with Aboriginal and non-Aboriginal communities

Monitoring environmental regulations

Monitoring legislative and regulatory amendments concerning wetlands

Monitoring workforce needs

2018 IN OVERVIEW

31

press releases published

56

interviews granted

65

Over 65 articles or reports in the media

40 M

40 million views, impressions and plays for mass-market communications actions

1

Publication of a study of the economic benefits generated by the mining industry

15

Submission of 15 briefs to the governments of Québec and Canada

19

Participation in 19 days of hearings at the Administrative Labour Tribunal

MESSAGE FROM THE CHAIR OF THE BOARD OF DIRECTORS



It is my privilege, for the fourth consecutive year, to present the annual activity report of the Québec Mining Association (QMA). It covers the QMA's

numerous achievements and summarizes its activities for the year 2018.

As everyone will agree, the mining industry plays a leading role in Québec's socio-economic development. This is true, of course, for the so-called "resource" regions, but also for the major urban centres, as we demonstrated in 2016. We confirmed this finding in the fall of 2018, in a new study released by the QMA that highlighted the economic benefits generated by the mining industry in Québec.

Obviously, the regions where mining takes place are those that receive the greatest benefits, but mining has an impact well beyond their boundaries. Of the \$8.5 billion in total spending by mining companies in Québec, \$1 billion was spent on the island of Montréal, ranking it third in the list of regions for spending. But credit where credit is due: the Abitibi-Témiscamingue is the region that garners the most economic benefits.

If Québec is to continue to enjoy the benefits generated by the mining industry, it is essential for the QMA to remain focused on its ultimate objective, which is to help ensure the ongoing viability of the industry in Québec. To achieve this, it is important to increase Québec's attractiveness compared to other jurisdictions worldwide. Although Québec still ranks in the world's top ten and has improved its score in some of the areas surveyed, the QMA had mixed feelings about the results of the Fraser Institute's annual survey of the attractiveness of mining jurisdictions worldwide. The results showed that Québec is standing still in the annual ranking, while other jurisdictions move ahead. This is the message that the QMA transmitted to the new government immediately following its election in October. It pointed out that the government needed to respect its election commitment to address the excessive delays that characterize the development of mining projects in Québec, in order to improve its competitiveness on the world stage.

The QMA's achievements in 2018 can be ascribed to the joint efforts of a number of people, including the members of the Board of Directors and the QMA's members, and I thank them for their contribution. Despite their everyday duties and busy schedules, they came together to help the QMA pursue its mission. The QMA can also rely on a highly competent team whose members have recognized expertise in their field. Thanks to their experience, their work can benefit the mining industry as a whole.

The achievements of the past year allow me to look to the future with enthusiasm.

JEAN-FRANÇOIS VERRET, ENG. Chairman of the Board

MESSAGE FROM THE PRESIDENT AND CEO

I am pleased and proud to present the 2018 Activity report of the Québec Mining Association (QMA). It is always surprising, when it comes time to

draw up the report, to note how much has been accomplished during the year. This report provides an exhaustive overview of all the works and main achievements of the QMA in the year 2018.

Despite the fluctuations in metals prices, 2018 saw no major disturbances, although the change in the provincial government did generate some uncertainty. The QMA seized the opportunity offered by the provincial election to promote Québec's mining industry and make the political parties and future MNAs more aware of mineral development issues. In keeping with the objectives of its strategic plan, the QMA spared no effort after the election to retain the same momentum and ensure that the new government was provided with all the information it needed to make decisions consistent with industry needs.

We all know, the issues of labour shortages and automation received more attention than in the past. Québec's mining industry is growing quickly, and must now do more to attract young people, women and Aboriginal workers to meet its workforce needs. This is why these topics have been an integral part of the QMA's strategic plan for several years. In addition, the social acceptability of projects and access to the land base remain a focus for the QMA and its members, in order to ensure a harmonious mineral development that will bring longterm prosperity. In 2018, the QMA continued its work to increase the mining industry's visibility in the media. During the year, various actions were implemented to explain the benefit Québec gains from having a strong, responsible mining industry focused on the future. We want to do more to showcase our industry, using means of communication that we would not have usually used. In short, we want to do things differently, and our strategy has worked! Our advertising campaigns in the spring and fall of 2018 surpassed the goals set in terms of audience numbers. We will continue on the same course and rate to ensure that the general public is made aware of the indispensable role the industry plays in daily life, of the fact that metals do not grow on trees, and that the mining industry is really Québec's driving force.

The year 2018 also brought a series of challenges. To overcome them the QMA could, once again, rely on the commitment and dedication of its qualified staff members, always available to support the QMA's members and enrich the range of services provided. I am in the ideal position to observe, every day, the quality of their work and I would like to offer them my sincere thanks for their efforts.

I also thank the members of the Board of Directors for their contribution to the QMA's success. It is truly a privilege to work alongside people with such a passionate interest in the development of Québec's mineral sector.

In closing, I would like to highlight the work of the QMA's committees and working groups, which provided valuable input for the results presented in the report. Together, we were able to make a difference.

JOSÉE MÉTHOT, ENG., M.B.A. President and CEO

EFFECTIVE REPRESENTATION

The QMA maintains a public presence to represent its members and the mining industry in general in relations with both government authorities and their partners.



Meeting of the Board of Directors with François Legault



POLITICAL REPRESENTATION

The 4th annual Mining Day on Parliament Hill prior to the provincial election

During the 4th annual Mining Day on Parliament Hill, held just before the provincial election, the QMA's Board of Directors had an opportunity to discuss priorities with the various political parties and ask them to make commitments towards the mining sector. Constructive discussions were held with:

- Pierre Moreau, Minister of Energy and Natural Resources;
- Sylvain Rochon, Official Opposition Critic for Energy and Natural Resources;
- Lorraine Richard, Official Opposition Critic for Northern Development and the Plan Nord;
- François Legault, Leader of the Second Opposition Group;
- Éric Lefebvre, Second Opposition Group Critic for Natural Resources;
- André Lamontagne, Second Opposition Group Critic for Economy, Innovation and Export Trade.

Premier Couillard is attentive to the issues presented by representatives of the QMA's Board of Directors.

EFFECTIVE REPRESENTATION



From left to right: Christian Provencher, Vanessa Laplante, Jean-François Verret, Philippe Couillard, Josée Méthot, Isabelle Verreault

Several issues were raised during a range of meetings with politicians and senior civil servants working for the Québec and Canadian governments. The ultimate objective was to ensure the long-term viability of Québec's mining industry by providing mining companies with a competitive and foreseeable environment. The following issues were discussed on multiple occasions in 2018:

- Reduction of the delays in the project authorization process;
- Reduction of the cost of operating in Québec;
- Amendments to the environmental authorization process;
- Simplification of the mining tax system;
- Amendments to labour standards legislation (disparity in the treatment of retirement plans, placement agencies);
- Administrative streamlining of various processes;
- Access to public land (protection for 30% of the area covered by the Plan Nord, areas unsuitable for mining activities);
- Relations with Aboriginal communities in land not under agreement;
- Government objectives for reductions in greenhouse gas emissions;
- Labour shortages.

REPRESENTATION WITH PARTNERS

To ensure that the concerns, issues, needs and priorities of the mining industry are properly presented, the QMA team sits on several committees, boards and discussion tables with partner organizations.

Mining Association of Canada (MAC)

• Non-voting member of the Board of Directors

Association paritaire pour la santé et la sécurité du travail du secteur minier (APSM)

- Member of the Board of Directors
- Member of the employers' caucus
- Member of the governance committee

Comité sectoriel de main-d'œuvre de l'industrie des mines (CSMO Mines)

- Member of the Board of Directors
- Member of the executive committee

Commission des normes, de l'équité, de la santé et de la sécurité du travail (CNESST)

- Member of the 3.57 committee and 3.57.1 committee
 - Member of the ground control technical subcommittee
 - Member of the underground mines technical subcommittee
 - Member of the open-pit mines technical subcommittee
 - Member of the explosives technical subcommittee
 - Member of the remote operation technical subcommittee

Conseil du patronat du Québec (CPQ)

- Member of the Board of Directors
- Member of the advisory committee on workplace health and safety
- Member of the prevention subcommittee

Quebec Business Council on the Environment (CPEQ)

- Member of the Board of Directors
- Member of the executive committee

COREM

• Non-voting member of the board of directors

Towards Sustainable Mining (TSM) initiative

- Member of the governance team
- Member of the industry leaders committee
- Member of the Community of Interests Advisory Panel

Institut national des mines du Québec (INMQ)

- Member of the Board of Directors
- Member of the audit committee
- Presidency of the strategic planning and project analysis committee
- Member of the selection committee for the president and CEO

Ministère de l'Énergie et des Ressources naturelles (MERN)

- Member of the advisory committee on mines
 - Member of the subcommittee on the streamlining of mining royalties
 - Member of the subcommittee on administrative streamlining
- Member of the advisory group on the elimination of coal as a source of energy

Ministère de l'Environnement et de la Lutte contre les changements climatiques (MELCC)

• Member of the joint MELCC-AMQ committee

Ministry of Labour of Ontario

• Non-voting member of the regulations committee

MISA

• Member of the Board of Directors

Ontario Mining Association (OMA)

 Observer member of the Mining Legislative Review Committee

Polytechnique Montréal

• Member of the advisory committee of the mining engineering department

Société du Plan Nord

Member of the Assembly of Partners

SOREDEM

• Member of the Board of Directors

The QMA team also participates in the work of the following organizations and working groups:

- Canadian Mineral Industry Federation (CMIF);
- Working group on non-industrial activities on 30% of the area covered by the Plan Nord;
- Monitoring committee for the modular mine worker training program;
- CNESST mine rescue service;
 - To increase the fairness for mining companies, the QMA has helped develop an agreement on a new invoicing procedure for the mine rescue service.



The QMA also took part in the orientation mission to the Norddu-Québec region organized by the Secretariat to the Cree Nation Abitibi-Témiscamingue Economic Alliance to meet with the various band councils and organizations active in the region.

RELEVANT AND CONSTRUCTIVE COMMENTS

The last year has seen a wealth of legislative and regulatory activities and the QMA has continued to defend its members' interests to ensure that the laws and regulations adopted are consistent with reality of mining activities in Québec.

Government of Québec

Submission of twelve briefs, comments and recommendations concerning:

- Inquiry mandate of the Bureau d'audiences publiques sur l'environnement (BAPE) covering BlackRock Metals' project for a processing plant to transform iron concentrate into cast iron and ferrovanadium;
- Pre-budget consultations;
- Draft regulation on sand pits and quarries;
- Act respecting the conservation of wetlands and bodies of water;
- Draft regulation respecting compensation for adverse effects on wetlands and bodies of water;
- Draft regulation respecting ministerial authorizations and declarations of compliance in environmental matters;
- Draft regulation respecting industrial depollution attestations;
- Draft regulation respecting hazardous materials;
- Draft regulation respecting certain transitional measures to carry out the Act to amend the Environment Quality Act to modernize the environmental authorization scheme and to amend other legislative provisions, in particular to reform the governance of the Green Fund;
- Draft regulation respecting the environmental impact assessment and review of certain projects;
- Guide for the establishment and operation of a monitoring committee;
- Bill 176, An Act to amend the Act respecting labour standards and other legislative provisions mainly to facilitate family-work balance.

Government of Canada

Submission of three briefs, comments and recommendations on:

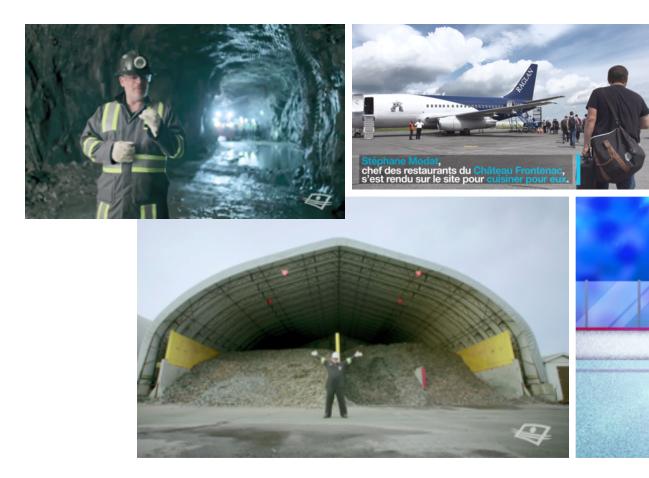
- Bill C-69, An Act to enact the Impact Assessment Act and the Canadian Energy Regulator Act, to amend the Navigation Protection Act and to make consequential amendments to other Acts;
- Bill C-68, An Act to amend the Fisheries Act and other Acts in consequence;
- Canadian Minerals and Metals Plan.

In 2018, the QMA continued to support its members with respect to the prohibition on mucking under loaded holes at hearings held by the Administrative Labour Tribunal. In all, 53 days of hearings were needed to deal with the issue, including 19 days of hearings in 2018. Thanks to the united front presented by all the mining companies involved and the strength of the evidence, the judge found clearly in favour of the mining industry.



DYNAMIC COMMUNICATIONS TO MIRROR A DYNAMIC INDUSTRY

Thanks to a range of actions and the use of various media, the QMA was able once again this year to find innovative ways to make the general public more aware of the mining industry. Result: **the actions created 40 million views, impressions and plays.** An unqualified success! With assistance from its members, the QMA team was involved in the following media campaigns:



DYNAMIC COMMUNICATIONS TO MIRROR A DYNAMIC INDUSTRY

To showcase the numerous technological innovations introduced in Québec's mining industry, the QMA has produced and released an inventory to introduce the general public to the innovative practices applied in mines in Québec. These "good practices" will be included in future mass-market communications activities.

- A video shoot at Eldorado Gold's Lamaque Mine and the Horne Smelter for the Génial! program broadcast on Télé-Québec;
- A video shoot at Raglan Mine for Journal de Montréal and another for a clip to be shown on social media with Stéphane Modat, head chef at the Champlain Restaurant and Le Sam Bistro at the Château Frontenac hotel;
- Production of a new humorous videoclip on hockey starring titanium and graphite;
- Production of five radio spots;
- A partnership with the Orchestre Métropolitain to highlight the indispensable role played by metals in the design of musical instruments, and the production of videoclips starring musicians from the orchestra;
- Presence at four mass-market events to reach out to young people;
- Production of a light-hearted educational children's book about the importance of metals and minerals, to be published in 2019;
- Coordination of activities for Québec Mining Week.



76% of Quebecers appreciated the video and audio advertising produced.

72% of Quebecers exposed to the QMA's advertising during the campaign stated that their opinion of the mining industry had changed to favourable or very favourable.

76% of Quebecers would like to see more advertising by the QMA.

62% of Quebecers would like to find out more about the mining industry after seeing or hearing the advertising.

According to a survey commissioned by the QMA



HIGH-VISIBILITY COMMUNICATIONS

In parallel with its mass-market communications, the QMA has continued to showcase the industry's achievements and defend its interests in the media.





- Publication of **31 press releases** on a range of subjects:
 - Mining investment in Québec
 - Election priorities for the industry
 - Study of economic benefits generated by the mining industry
 - 2018-2019 Québec government budget
 - Ranking by the Fraser Institute
 - Legislative and regulatory amendments
 - Prizes and honours awards presented to QMA members
 - 2018 industry review
 - Etc.
- 56 interviews given to media organizations throughout Québec
- More than 65 articles or reports in the media

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Publication of 31 press releases

56 interviews given to media

More than 65 articles or reports in the media

13

A WEALTH-CREATING INDUSTRY



RETOMBÉES ÉCONOMIQUES DU SECTEUR MINIER QUÉBÉCOIS

Dépenses totales de 8,5 MILLIARDS de de dollars

Abitibi-Témiscamingue: 3,2 milliards de dollars
 Côte-Nord: 2,1 milliards de dollars
 Montréal: 970 millions de dollars



en impôt minier, taxes, impôt sur le revenu des particuliers, etc.

> Association minière du Québec



Who said that mining benefits only the resource regions? The QMA set itself the goal of showing that the whole of Québec profits from its members' operations, and published its second study of the economic benefits generated by the mining industry. The data in the study shows, among other things, that

\$8,5 B

\$8.5 billion in total expenditures by mining companies in Québec;

40 540

40,540 jobs are created or maintained;

\$96 500

\$96,500 is the average annual salary for mining jobs;

3 950

3,950 suppliers cater to the mining industry in Québec;

962 M\$

\$962 million is paid each year to the Québec government, in addition to the corporate income tax paid. The study received extensive media coverage, and was sent out to several Québec politicians and senior civil servants, as well as many different industry partners, to highlight the industry's contribution to prosperity in Québec.



ACTIONS TO SUPPORT SUSTAINABLE MINERAL DEVELOPMENT

During 2018, the QMA extended the work undertaken for the *Towards Sustainable Mining* initiative, by ensuring its implementation by its members. Over 90% of the QMA's member companies have now implemented TSM.

To ensuring ongoing improvement, the Association has reached an agreement with the Innovexplo firm to support companies in the implementation phase, provide training, and help them achieve further improvements as part of the TSM initiative.





MEETINGS BETWEEN MEMBERS TO ENHANCE THE INDUSTRY

The Québec Mining Association and the mining industry itself are enhanced when its members come together. This is why the QMA promotes discussions and networking between the representatives of its member companies by providing numerous opportunities for meetings and discussions.

Major events

GROUND CONTROL SEMINAR 142 participants

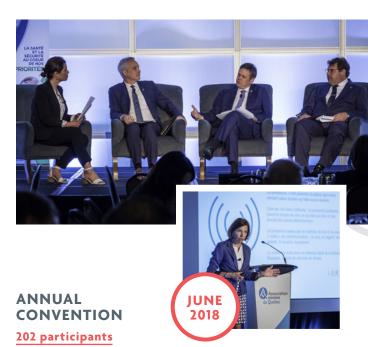


12 conferences on a range of topics, including

- Longhole drilling
- The influence of corrosion on friction bolts
- The salvaging of mature areas in convergence zones
- More reliable planning using rock mechanics
- Mining strategy for a pillar with high seismic potential
- Contributions to geomechanical site optimization

10 exhibitors present





- 5 conferences and 1 panel discussion on:
- High-impact communications approaches
- The importance of humans in the safety chain
- Sustainable influence
- Prospects for 2018 in the mining sector
- Conference by Pierre Moreau, Minister of Energy and Natural Resources
- Panel discussion on political party electoral priorities between Éric Lefebvre (CAQ), Sylvain Rochon (PQ) and Guy Bourgeois (QLP)

At its 2018 annual convention, the QMA presented F.J. O'Connell trophies for the 52nd time, recognizing the achievement of high performance levels in mining operations and highlighting actions by members to improve their workplace health and safety record.

In 2018, the companies presented with an F.J. O'Connell Trophy were:





MINE RAGLAN, A GLENCORE COMPANY

Underground operations - 400,000 hours and over From left to right: In Front: Josée Méthot, Carole St-Onge, Martin Dumont, Pierre Barrette, Cindy Hall, Céliane Dorval, Jean-François Verret In the back: Guy Dufour, Amélie Rouleau, Mario Paquin

AGNICO EAGLE MINES – LAPA MINE

Underground operations - less than 400,000 hours (ex aequo) From left to right: Josée Méthot, Karine Marchand, Louis Duval, Glorian Roy, Christian Goulet, Joël Provencher, Alain Rioux, Benoit Massicotte, Jean-François Verret



ELDORADO GOLD – LAMAQUE MINE

From left to right: Josée Méthot, Gilbert Bouffard, Joël Gauthier, Sylvain Lehoux, Jean-Guy Lévesque, Jean-François Verret

Underground operations - 400,000 hours and over



CANADIAN MALARTIC MINE Surface operations, transportation and primary metals processing

From left to right: Josée Méthot, Josée Plouffe, Stéphane Tardif, Serge Blais, Robin Tremblay, Vanessa Laplante, Jude Boucher, Maxime Grondin, Patrick Mercier, Jean-François Verret

MEETINGS BETWEEN MEMBERS TO ENHANCE THE INDUSTRY

WORKPLACE HEALTH AND SAFETY SEMINAR



318 participants

6 conferences focusing on:

- Pre-task risk analysis
- Decision by the Administrative Labour Tribunal on mucking under loaded holes
- Artificial intelligence—opportunities and challenges for businesses
- The repercussions of a workplace accident
- 15 exhibitors present

The Workplace Health and Safety Seminar offers an opportunity to recognize the effort made by the men and women who have become a source of pride for the mining industry by keeping their workplace accident-free for periods of between 50,000 and 500,000 hours. The 145 workers honoured are from the following companies:

- Agnico Eagle Mines Ltd.
 - Goldex Mine;
 - Lapa Mine;
 - LaRonde Mine;
- ArcelorMittal Mining Canada G.P.
- Canadian Malartic G.P.
 - Canadian Malartic Mine;
- Canadian Royalties Inc.;
- Eldorado Gold Lamaque;
- Glencore
 - Horne Smelter;
 - Matagami Mine;
 - Raglan Mine;
- Goldcorp
 - Éléonore:
- Graymont (Qc) Inc.
 - Marbleton Plant;

- Hecla Ouébec
 - Casa Berardi Mine;
- IAMGOLD Corporation
 - lamrock;
 - Westwood Mine;
- K+S Windsor Salt Ltd.
 - Seleine Mines;
- Monarch Gold Corporation
 - Camflo Mill;
- Niobec, a Magris Resources company;
- Nyrstar
 - Langlois Mine;
- Redpath Canada Ltd.
- Stornoway Diamond Corporation
 - Renard Mine.





Stéphane Richard, mine production foreman without a lost-time injury.



Israël Gauthier, supervisor at the Horne Smelter acid and oxygen plant, receives a silver ingot to mark his team's 500,000 hours of work without a lost-time injury.

ANNUAL MEETING OF MINE NURSES

NOVEMBER 2018

- **19 participants**
- 4 training sessions on:
- Work-related musculoskeletal disorders
- Mental health
- Signs of intoxication and impaired ability following drug use in the workplace
- Access to medical information

NEEDS-FOCUSED TRAINING SESSIONS

As laws and policies change, issues become more complex. This is why the QMA monitors developments to remain abreast of new requirements and procedures, and also organizes training or information sessions for its members to provide them with the tools they need in their everyday operations. In 2018, the QMA organized sessions on a wide range of topics:

- Policy on the consultation of Aboriginal communities specific to the mining sector;
- Guide to the establishment of monitoring committees;
- Use of organizational diagnosis software in workplace health and safety;
- Fisheries Bill (C-68);
- Behavioural approach to workplace health and safety;
- Legalization of marijuana;
- Compilation of accident statistics;
- Aboriginal cultures;
- Managing difficult personalities;
- Social media;
- Labour law;
- Non-monetary recognition of work by employees;
- Mindfulness in the workplace;
- Act respecting labour standards;
- GESTIM interactive map;
- TSM initiative (mine tailings management);
- Metal and Diamond Mining Effluent Regulations.



To help its members deal with a new issue, the Association has developed a generic policy on marijuana use based on the principle that impairment from the use of marijuana

is an unacceptable risk in the workplace and incompatible with safe operations. The policy is available to all QMA members and includes a checksheet for identifying signs of impairment.





DEDICATED COMMITTEES

Representatives of the QMA's member companies meet for discussions at the QMA's committees, which remained extremely active in 2018.

CATAMINE COMMITTEE

Chair:

Nancy Létourneau, LaRonde Mine, Agnico Eagle Mines

COMMUNICATIONS COMMITTEE

Chair:

Stéphanie Lemieux, Horne Smelter, a Glencore company

COMMUNITY RELATIONS COMMITTEE

Chair: Simon Thibault, Nemaska Lithium

ENVIRONMENT COMMITTEE

Chair:

Martin Duclos, Canadian Malartic Mine, Canadian Malartic G.P

GROUND CONTROL COMMITTEE

Chair:

Dany Audet, Westwood Mine, IAMGOLD Corporation

HEALTH AND ACCIDENT PREVENTION COMMITTEE

<u>Chair:</u>

Marc Moffette, Agnico Eagle Mines term ending in September 2018

HUMAN RESOURCES COMMITTEE

Chair:

Evelyn Gauthier, Seleine Mines, K+S Windsor Salt Ltd.

MAINTENANCE COMMITTEE

Chair:

Martin Pichette, Eldorado Gold Lamaque

TAXATION COMMITTEE

Chair:

Vanessa Laplante, Canadian Malartic G.P.

STRATEGIC COMMITTEE ON HUMAN RESOURCES

STRATEGIC COMMITTEE ON WORKPLACE HEALTH AND SAFETY

WORKING GROUP ON THE SUBJECT OF THE ALGONQUIN COMMUNITIES IN ABITIBI-TÉMISCAMINGUE

In a sign of the members' interest in the QMA's work, a new committee was set up in 2018: the Industrial Hygiene Committee. Its objective is to promote discussions between members on this key question, and it attracted fifteen participants to its first meeting. Guillaume Lachapelle of Agnico Eagle Mines will chair the new committee.

AN ASSOCIATION THAT SUPPORTS ITS PARTNERS AND FUTURE WORKERS

Because of its credibility and expertise, the QMA is often asked by other organizations to support various projects and positions:

- All-electric mine project: using ore preconditioning to reduce energy consumption and comminution;
- All-electric mine project: using alternative energy to power mine vehicles;
- Project to develop a new electric drive system for mine vehicles (an initiative of the Grappe industrielle des véhicules électriques et intelligents du Québec);
- PHYTOBIOREM, the first project to develop an innovative in situ model for the biorestoration of acid mine runoff using phytobian filtration;
- Project for an international convention on scientific research in industrial and port zones.

The mining industry's need for workers has led the QMA to take action in several areas to help its partners ensure that the needs of mining companies are met and to continue to attract young people to a career in the mining industry:

- Support for Université Laval for its action plan to reverse the decrease in enrolment in the Department of Mining Engineering, Metallurgy and Materials;
- Participation in the work of the advisory committee on mine engineering at Polytechnique Montréal to guide the department on the software that all new graduates should master;
- Contribution to the promotion of programs offered by schools in Northern Québec and the positions offered by mining companies in the North;
- Presentation to the Assembly of Partners at the Société du Plan Nord about the mechanisms to attract and retain workers put in place by mining companies, and about mining company needs in Northern Québec;

- Collaboration with the James Bay vocational education centre and the Huron-Wendat centre for labour training and development and promotion of the vocational training programs "Forage-dynamitage" and "Extraction de minerai" in the Québec City region to accommodate Frenchspeaking Aboriginal students;
- Intervention with École des technologies supérieures to ensure that it takes fly in/fly out realities into account when recognizing the number of hours worked;
- Participation in the digital skills project with Institut national des mines du Québec and CSMO Mines to determine current worker skills and training needs to help mining companies deal with the issues raised by the deployment of Industry 4.0 technologies.

The Association, in its ongoing work to support future workers, awarded three scholarships in 2018.



From left to right: François Fournier Roy (Geological engineering, Université Laval), Marika Labbé (Geological engineering, Université Laval), Christopher Grondin (Geological engineering, Université Laval), Josée Méthot

DISSOLUTION OF SOREDEM

2018 was the year in which SOREDEM was dissolved after 26 years of operation. Before closing its books, SOREDEM made a final contribution of \$50,000 to Université Laval to support its research activities in connection with a new phase of the "rock fragmentation using a plasma torch" project. In addition, given the need to maintain the research scholarship program awarded by the Fonds Claude-Drouin for students at the Master's and Doctorate levels, it was agreed to transfer funding and management for the program to the Québec Mining Association following the dissolution of the corporation.

The Québec Mining Association would like to thank everyone who contributed to SOREDEM's mission over the years, making it possible to launch many different projects and make a difference in mine operations.

MEMBERS OF THE BOARD OF DIRECTORS

(as at December 31, 2018)

- Jean-François Verret
 Chairman of the Board and Director,
 Capital Projects, Geology and
 Exploration, Raglan Mine,
 a Glencore company *
- Christian Provencher
 Vice-Chairman of the Board and
 Vice-President, Canada, Agnico
 Eagle Mines *
- Olivier Berman
 Secretary of the Board and General
 Manager, Seleine Mines, K+S Windsor
 Salt Ltd. *
- Vanessa Laplante
 Treasurer of the Board and Tax
 Director and Montreal Office
 Director, Canadian Malartic G.P. **
- Claude Bélanger
 General Manager, Horne Smelter,
 a Glencore company *

- Alexandre Belleau
 General Manager, Projects
 & Innovation, Quebec Iron Ore
- Sophie Bergeron
 Mine General Manager,
 Goldcorp Éléonore
- Nicolas Dalmau
 General Manager, Public relations and Government relations, ArcelorMittal Mining Canada G.P.
- André Gaumond
 Member of the Board of Directors, Osisko Gold Royalties
- Luc Guimond
 President, CMAC-THYSSEN
 Mining Group
- Jean Quenneville
 Director, External Affairs –
 Québec, Rio Tinto

- Patrick Sévigny
 Manager, Mining Operations,
 Stornoway Diamond Corporation
- Stéphane Ste-Croix Director, Continuous Improvement, IAMGOLD Corporation
- Hélène Lauzon
 President, Quebec Business Council
 on the Environment (CPEQ)
- Isabelle Verreault
 Senior Vice-President and General
 Manager for Québec,
 Hill+Knowlton Strategies
- * Members of the Executive Committee ** President of the Audit and Finance Committee

MEMBERS OF THE ASSOCIATION

(on December 31, 2018)

MINES AND TREATMENT AND PROCESSING FACILITIES

- Agnico Eagle Mines Ltd.
 - Goldex Mine
 - Lapa Mine
 - LaRonde Mine
- ArcelorMittal Mining Canada G.P.
 - Bonterra Resources
 - Bachelor Mine
- Canadian Malartic G.P.
 - Canadian Malartic Mine
- Canadian Royalties Inc.
 - Eldorado Gold
 - Lamaque Mine
- Glencore
 - Horne Smelter
 - Matagami Mine
 - Raglan Mine
- Goldcorp
 - Éléonore Mine
- Graymont (Qc) Inc.
 - Bedford Plant
 - Marbleton Plant
- Hecla Québec
 - Casa Berardi Mine
- IAMGOLD Corporation
 Westwood Mine
- Monarch Gold Corporation
 - Beaufor Mine
 - Camflo Mill
- New Millennium Iron Corporation
- Niobec, a Magris Resources company
- North American Lithium
- Nyrstar
 - Langlois Mine
- Omya Canada Inc.
 - St-Armand Plant
- Quebec Iron Ore *
- Rio Tinto Fer et Titane
- Seleine Mines, K+S Windsor Salt Ltd.
- Stornoway Diamond Corporation

 Renard Mine
- Tata Steel Minerals Canada Limited
- Yamana Gold Inc.

MINING CONTRACTORS

- Bird Heavy Civil Ltd
- Cementation Canada Inc. (Québec Division)
- CMAC-THYSSEN Mining Group
- Construction Kiewit Cie
- Dumas Contracting Ltd.
- EBC Mines Inc.
- Groupe GilbertIamrock Inc.

- Machines Roger International
- Procon Canada East
- Redpath Canada Ltd.

MINERAL EXPLORATION COMPANIES, MINING PROJECTS IN DEVELOPMENT AND MINES IN THE PROCESS OF FINAL CLOSURE

- Arianne Phosphate Inc.
- Falco Resources Ltd.
- Galaxy Lithium *
- Mine Arnaud
- Nemaska Lithium
- Nouveau Monde Graphite *
- Osisko Gold Royalties
- RNC Minerals
- Sayona Québec *
- Wesdome Gold Mines
 _ Kiena mine

INSTITUTIONS AND NON-PROFIT ORGANIZATIONS

- 48e Nord International
- Centre de formation professionnelle de la Baie-James
- Centre de formation professionnelle Val-d'Or *
- COREM
- Institut national des mines du Québec
- Quebec Metallurgy Center

SUPPLIERS OF GOODS AND SERVICES

- Armatures Bois-Francs *
- Emplois Compétences *
- Englobe *
- Entreprises Larry
- Epiroc
- Fenner Dunlop *
- Fournier Industries Inc.
- Groupe Conseil Novo SST *
- InnovExplo
- Major Mesh *
- McCarthy Tétrault
- PwC
- RM Recrutement International *
- SGS Canada
- SMS Equipment
- Stantec
- Toromont Industries Ltd.
- * Joined in 2018

THE ASSOCIATION TEAM

(on December 31, 2018)

- Josée Méthot President and CEO *
- Julie Boissinot Advisor, Strategic Communications
- Carole Côté
 Director, Administration
- Katie Deneault
 - Director, Human Resources and Workforce Development Consulting Services
- Sandra Gadoury
 Executive Assistant

Anne-Marie Painchaud

Communication

Nancy Roger

Advisor, Marketing & Public

Administrative Assistant,

and Technical Services

Mathieu St-Amant

Geneviève Tölgyesi

Environment, Health and Safety

Director, Strategic Communications

Administrative Assistant, Strategic

Communications, Administration,

Human Resources and Workforce

development Consulting Services

* Member of the Executive Committee

** Commenced duties in 2018

 Maxime Lachance Coordinator, Community Relations and Sustainable Development **