

ANNUAL REPORT 2011



The Mining Association of Canada

ADVOCACY STEWARDSHIP COLLABORATION

TABLE OF CONTENTS

INTRODUCTION

About the Mining Association of Canada (MAC)	4
Message from the Chairman and the President & CEO	5
Report from the Chair of the Towards Sustainable Mining Governance Team	7

COMMITTEE REPORTS

Environment Committee	11
Metals Working Group	13
Public Affairs Committee	14
Science Committee	16
Tailings Working Group	25
Taxation Committee	27
Transportation Committee	29
International Social Responsibility Committee	32
Energy Committee	35

OTHER WORK AREAS

International Trade and Investment	38
Mining Industry Human Resources (MiHR) Council	41

DIRECTORS & COMMITTEES

MAC Board of Directors	46
Committee Membership	47
Membership	53
Staff	54



INTRODUCTION



ABOUT THE MINING ASSOCIATION OF CANADA

THE MINING ASSOCIATION OF CANADA

The Mining Association of Canada (MAC) is the national organization of the Canadian mining industry. It comprises companies engaged in mineral exploration, mining, smelting, refining and semi-fabrication. Member companies account for the majority of Canada's output of metals and major industrial materials.

MAC promotes the interests of the industry nationally and internationally, works with governments on policies affecting minerals, informs the public, and promotes collaboration to solve common issues and foster progress. MAC works closely with provincial and territorial mining associations and other industries, as well as with environmental and community groups across Canada.



MESSAGE FROM THE CHAIRMAN AND THE PRESIDENT & CEO

Doug Horswill, Chair of the Board of Directors
Pierre Gratton, President & CEO

Last year marked a positive period for the Canadian mining industry. Fuelled by strong demand and high commodity prices, the positive economic environment stimulated billions in new investment, sparked more exploration activity and increased exports.

As Canada focuses on a still fragile recovery, the mining sector shines as a powerful growth engine for Canada's economy and an important source of well-paying jobs for hundreds of thousands of Canadians.

In 2011, mining experienced significant growth driven by strong demand in emerging markets. The industry accounted for 21% of exports and Canada was the world's top destination for exploration spending in 2010. The sector also provided business for some 3,200 supplier companies, and represented half of the freight revenue of Canada's railroads.

The future of mining looks very bright indeed. Demand for Canadian minerals and metals is creating long-term opportunities for the mining sector. However, in order to seize these opportunities, government and industry must work together to maintain an operating environment with the conditions required for success. Toward that end, in 2011, MAC developed a new strategic plan for the period of 2012-2016 which identifies five strategic goals covering the following areas: CSR/Social License (reputation), Regulatory Efficiency, Economic Competitiveness, Public Communications (the "mining narrative") and Organizational Excellence. The strategic plan is supported by an operational plan that includes a detailed list of activities that will guide MAC's work towards specific outcomes. Progress against identified objectives will be measured at regular intervals using qualitative and quantitative performance indicators.

Corporate social responsibility (CSR) remained a critical issue throughout the year. Although the overall Canadian industry is viewed as a global leader in CSR, the landscape is complex and ever-changing. As a clear demonstration of industry's desire to have MAC take a more proactive approach to CSR, MAC created the new International Social Responsibility (ISR) Committee. The ISR Committee identified four priority areas of work and subsequently commissioned two important research projects. The first was an analysis of the status of recommendations arising from the 2006 National Roundtables on CSR. The second was a study of accountability mechanisms in Canada and other select countries. The Committee's ambitious work plan for 2012 includes work in the areas of Free, Prior and Informed Consent (FPIC) and Transparency.

Last year, MAC member-companies substantially increased their performance in all of the mandatory social and environmental requirements of MAC's Towards Sustainable Mining (TSM) initiative. In 2011, MAC initiated the process of renewing the Community of Interest (COI) Advisory Panel to ensure that it remains relevant, dynamic and a place for rich dialogue between MAC and its communities of interest. The COI Advisory Panel now includes participation from a more diverse group of communities and is much more

engaged on a broader set of CSR issues. The panel will continue to provide advice and guidance on TSM implementation in 2012 and beyond.

MAC's advocacy in 2011 focused on regulatory efficiency, infrastructure investment and human resources. Our sustained advocacy efforts on the regulatory efficiency front have resulted in much needed changes to the Canadian regulatory regime. Announced in early 2012, the Government of Canada's Responsible Resource Development Plan is a strong and effective response to industry requests. We are encouraged by the proposed regulatory reforms as they will result in more efficient and timely reviews of mining projects.

In 2011, MAC increased its visibility to media and the general public. During the year, MAC partnered with provincial mining associations in Ontario and Saskatchewan to hold luncheon events for media and industry guests in Sudbury and Saskatoon. These events resulted in substantial coverage in local and national media outlets, and act as a logical complement to MAC's expanded media engagement efforts going forward. MAC also undertook a modest, Ottawa-centric advertising campaign in 2011 – a first for the Association! The ads, featuring the tagline "Before it's yours, it's mined", have elicited very positive feedback from parliamentarians, staffers and public servants. In November 2011, the MAC Board approved a much-expanded communications plan to build on these efforts for 2012.

We were pleased to expand MAC membership in 2011 by adding five new full members - Agnico-Eagle, Imperial Metals, New Gold, Shore Gold and Taseko. We also welcomed three new associate members: McGill University, York University (Schulich School of Business) and Quebec Lithium Inc.

MAC's achievements in 2011 were due to the collective efforts of many people. These individuals include our strong Board of Directors, Executive Committee and TSM Governance Team, and the committed industry representatives who lend their expertise to committees, task forces, working groups and multi-stakeholder groups. We also boast one of the strongest association staffs in Ottawa, composed of individuals who are recognized for their expertise and professionalism by government and other associations. With their mix of skills, experience and teamwork, they deliver tangible outcomes that benefit the entire industry. Their work is much appreciated by the Board and members of MAC.

As we look to the year ahead, we see an industry poised for continued growth in virtually all regions of Canada. In 2012, MAC will focus its advocacy efforts on regulatory efficiency and strategic infrastructure investments. We also share some priorities with the broader business community, including support for international trade and investment, and the need for a renewed focus on skills development. Together with regulatory and infrastructure priorities, advancement in these areas will provide strong footing for sustained investment in a globally-competitive Canadian mining industry.

For more details on the topics discussed here, and on other aspects of MAC's work, we encourage you to read the annual report in full.

REPORT FROM THE CHAIR OF THE TOWARDS SUSTAINABLE MINING GOVERNANCE TEAM

Gordon Ball, Vice President, Syncrude Canada Ltd.



The Towards Sustainable Mining (TSM) Governance Team examines opportunities for improving the mining industry's performance and reputation with key stakeholders.

HIGHLIGHTS

- Launched TSM eLearning program for member companies and verification service providers.
- Initiated renewal of the Community of Interest Advisory Panel.
- MAC members reported internally their performance for the first time in the areas of biodiversity conservation management, and safety and health.
- Initiated work on revised energy use and greenhouse gas emissions management protocol.
- Surveyed membership on International Standards and Initiatives, and compiled a new tracking table for publication.
- Produced and published *2011 Progress Report* in a new multimedia format on the MAC website.
- MAC gave a plenary presentation at the 2011 International Mine Closure Conference in Lake Louise that provided an overview of TSM and a status report on the draft Mine Closure Protocol.
- MAC introduced TSM to an international audience in Sao Paulo, Brazil, at the invitation of the Planet Earth Institute, a UN-sponsored NGO.

TOWARDS SUSTAINABLE MINING (TSM) ONLINE TRAINING

TSM training is now available in an online format for member companies. The online training program consists of eight courses that will prepare participants to develop and maintain management systems consistent with the TSM protocols. It will also train members on how to complete a self-assessment for their company's facilities using the TSM assessment protocols. The eLearning training program will also help users understand the process for external verification. The program has also been designed to satisfy the training requirement for verification service providers.

COMMUNITY OF INTEREST (COI) ADVISORY PANEL RENEWAL

In 2011, a COI Panel design team, made up of MAC staff and members from both the MAC Board of Directors and the COI Advisory Panel, met to develop a new Terms of Reference to ensure that the Panel remains

relevant, dynamic and a place for rich dialogue between MAC and its communities of interest. The COI Advisory Panel's mandate, work and composition have remained largely unchanged since its inception in 2004. It continues to provide advice and guidance on TSM's implementation and will start to raise broader issues of public policy and mining industry activities in 2012.

ENERGY USE AND GREENHOUSE GAS EMISSIONS MANAGEMENT

In response to slower improvement than expected amongst member companies in the area of Energy Use and Greenhouse Gas Emissions Management, a review of the TSM protocol was initiated to determine the root cause for weak improvement. The review looked at both the contents of the protocol, as well as training and support relevant to energy and greenhouse gas management offered by MAC. The findings of the review suggested that the protocol should be updated to reflect the current state of climate change mitigation policy and practice to ensure that it remains relevant. Based on this finding, in 2011, the Energy Task Force initiated a process to update the energy use and greenhouse gas emissions management protocol.

In 2012, the Energy Task Force will continue to revise the indicators and provide training to member companies and verification service providers. The TSM Governance Team has made performance improvement for energy use and greenhouse gas emissions management a top priority for 2012 and will continue to follow progress closely.

MINE CLOSURE

Throughout 2011, the Mine Closure Working Group continued to define specific performance indicators to manage mine closure. Draft indicators were presented to the TSM Initiative Leaders and the Community of Interest Advisory Panel for input. MAC also presented an update on the draft Mine Closure Protocol at the 2011 International Mine Closure Conference held this year in Lake Louise. However, due to the prioritization of the Energy Use and Greenhouse Gas Emissions Management Protocol revision process and the need to develop training to support the biodiversity management system protocol, continuing work on the Mine Closure Protocol has been deferred until 2012. The Mine Closure Protocol is expected to be complete and available for voluntary application in January 2013.

TSM ARBITRATION PROCESS

On occasion, TSM Initiative Leaders (ILs) have witnessed differences of interpretation of the TSM protocols during external verification. In 2011, there were two such cases. Up until now, ILs have asked MAC for guidance, which places MAC staff in the difficult position of arbitrator. To resolve this and establish a formal process, the TSM Governance Team (GT) established a working group to review and approve responses to MAC member companies when there is a difference of opinion between a verifier and a MAC member company during external verification.

The new process requires a MAC member to submit a written request to provide additional guidance on TSM protocol interpretation. Stratos, an Ottawa-based consulting firm, then prepares a draft response and circulates that draft to the GT Working Group, which provides a response within 48 hours. The information is then circulated to the rest of the GT for information. If required, this guidance would become a Frequently Asked Question that would be inserted into the next version of the protocol.

TSM PERFORMANCE IMPROVEMENT

As a result of an analysis of the tailings management performance results in 2010, MAC focused its attention on improving the industry's performance in this area. MAC provided members with training workshops on the application of the Tailings Management guides. In 2011, the aggregate results of the industry's performance in tailings management showed a significant improvement across the five indicators.

TSM COMMUNICATIONS

In 2011, MAC introduced its Towards Sustainable Mining Progress Report in a paperless multimedia format as a way to demonstrate its commitment to sustainability. In 2012, MAC will continue to identify ways to enhance the way TSM results are communicated to the public through new multimedia and social media mechanisms. MAC will also develop a broad communications strategy to help increase the value of TSM participation to member companies.

PLANS FOR 2012

- Complete the COI Panel Renewal process, draft a revised Terms of Reference for the Panel and initiate a nomination process. New members of the COI Advisory Panel will be invited to the September 2012 meeting.
- Revise the TSM Energy Use and Greenhouse Gas Emissions Management protocol and host training for members on the revised indicators.
- Undergo a review of the Crisis Management Guidance Manual to ensure that it is up-to-date and relevant.
- Develop training and support mechanisms to improve understanding and performance for the Biodiversity Conservation Management Protocol. These mechanisms will be based on a lessons-learned workshop that will be held during the Protocol's first year of application.
- Develop a communications strategy to ensure that stakeholders are aware of the TSM initiative and the progress that has been made over the past seven years.

COMMITTEE REPORTS



ENVIRONMENT COMMITTEE

Chair: Marc Butler
Director of Regulatory Affairs, Xstrata Nickel

The Environment Committee addresses general environmental issues affecting the industry.

HIGHLIGHTS

- Advocacy for greater clarity and certainty in the application of the *Fisheries Act* to mines and mining projects.
- Engagement in the Parliamentary review of the *Canadian Environmental Assessment Act*.
- After five years of leading the work of the Environment Committee, Darrell Martindale (Shell) stepped down as chair, and Marc Butler (Xstrata Nickel) took over the role.

In 2011, the Environment Committee met jointly with the MAC Science Committee in March in Toronto, in June at the Syncrude Research Facility in Edmonton, and in October in Ottawa. The focus of the Committee's work throughout the year was the *Fisheries Act*, with continued priority on federal legislation affecting project approvals.

The Committee reviewed members' experience with the application of the *Fisheries Act*, which indicated growing inconsistencies among different mines and mining projects. The review led to an advocacy program, which involved meetings with officials and Ministerial staff in Environment Canada, Fisheries and Oceans Canada, and Natural Resources Canada, as well as various Members of Parliament and Minister Kent. MAC member participation in the meetings greatly enhanced their impact. The main message was the need for clarity on the circumstances when the *Fisheries Act* applies, need for clarity on how the different sections of the Act apply, and need for compliance certainty for all mines.

MAC was invited to appear before the House of Commons Standing Committee on Environment and Sustainable Development during the review of the *Canadian Environmental Assessment Act*. In its submission, MAC highlighted the dramatic improvements in timeliness and federal/provincial coordination from the Act's 2010 amendments. MAC also stressed the importance of maintaining capacity in the Canadian Environmental Assessment Agency and the Major Projects Management Office to support efficient and timely assessment and permitting for a growing list of mining projects. MAC also recommended additional improvements to the Act, particularly enabling the concept of equivalency and regional assessments.

At its October meeting, the Environment Committee heard from Agency officials about the implementation of the 2010 amendments and progress on improving Aboriginal consultation.

MAC continued to work with other resource industry associations on federal acts that affect resource projects. Associations discussed their positions in the review of the *Canadian Environmental Assessment Act*, and discussed the *Species at Risk Act*, the *Migratory Birds Convention Act* and the *Fisheries Act*.

The publication of a proposed recovery strategy for woodland caribou under the *Species At Risk Act* raised great concern. The proposed strategy relies on a single model for a very large region with great variation in the degree of human disturbance and in natural forest fire dynamics. The model's conclusions were inappropriate and inconsistent with on-the-ground observations in parts of the caribou's range. MAC submitted its comments on the strategy and discussed the issue with Environment Canada officials. MAC also suggested that Environment Canada consider the recommendations of the multi-stakeholder British Columbia Task Force on Species at Risk, which pointed to the need for a broader and more flexible range of approaches to management and recovery of species at risk.

The Environment Committee also monitored greenhouse gas-related issues, discussed developments in provinces and regions, and shared with other industries concerns about the potential for overlap and inconsistencies.

MAC continued to participate in a multi-party process—which included federal and provincial governments, industry, and environmental and health NGOs—to finalize elements of the Air Quality Management System (AQMS). AQMS was announced in October 2010 by the Canadian Council of Ministers of the Environment, based on a multi-party proposal. AQMS elements include emission standards for major industrial sectors, revised ambient air quality standards, and comprehensive air zone management by provinces driven by ambient air quality.

MAC monitors international developments that may affect domestic policy or world markets for mineral products. As part of this monitoring, the Environment Committee considered the implications of the United Nations Environment Programme's negotiation of a mercury agreement, which may have inadvertent effects on non-mercury mineral products. Several members participated in a stakeholder consultation workshop and officials briefed the Committee throughout the year on the progress of negotiations.

To boost its effectiveness, MAC belongs to several formal and informal industry groups. They include the Industry Coordinating Group on the Canadian Environmental Protection Act, the Industry Steering Committee on Climate Change and Clean Air, the Environmental Health Industry Coordinating Group, the North American Metals Council and the International Council on Mining and Metals.

For more information on MAC's environmental initiatives and the reduction of releases from member facilities, see the *Towards Sustainable Mining Progress Report*, available on MAC's website (www.mining.ca).

METALS WORKING GROUP

Chair: Mike Dutton
Director, Environment and Health Services, Vale

The Metals Working Group addresses Canadian regulatory and policy developments concerning the assessment and management of substances.

HIGHLIGHTS

- Early engagement in Chemicals Management Plan Phase 2 and the assessment of cobalt compounds.

The Metals Working Group continued to monitor Canada's Chemicals Management Plan (CMP) under the *Canadian Environmental Protection Act* (CEPA). It also reviewed and advised MAC on information requests issued under CEPA Section 71 during the year.

In October 2011, Environment Canada announced the second phase of the CMP, which is to begin assessing medium-priority substances. The second phase, which is to run through 2016, will assess cobalt, selenium, and boron and their compounds. The remaining metals will be assessed in 2016 to 2020.

MAC arranged a briefing in January for Environment Canada and Health Canada officials with international metal association experts. The briefing covered Europe's REACH program, the Globally Harmonized System of Classification and Labeling, and international industry work on the classification of ores and concentrates.

Vale and Xstrata Nickel hosted a three-day tour of Sudbury facilities for Environment Canada officials to explain mining, mineral processing, tailings, smelting and refining. MAC provided officials with links to the reports and data generated from site risk assessments near Canadian smelters. MAC also organized a meeting with officials to discuss their information needs. Mike Dutton (Vale) arranged for the Cobalt Development Institute to share the wealth of information on cobalt and cobalt compounds generated by the European cobalt consortium as part of the REACH program.

Throughout the year, Mike Dutton (Vale) represented MAC on the Industry Coordinating Group on CEPA, and Justyna Laurie-Lean (MAC) was the representative on the Environmental Health Industry Coordinating Group.

PUBLIC AFFAIRS COMMITTEE

Chair: Kara Flynn
Manager, Public Affairs, Syncrude Canada Ltd.

The Public Affairs Committee provides advice and guidance on MAC's public affairs and communications programming.

HIGHLIGHTS

- Ongoing advocacy, guidance and strategic support for MAC's federal public policy agenda.
- Regional outreach events in partnership with provincial mining associations.
- Another successful Mining Day on the Hill.
- Continued support of MAC's TSM initiative.
- Implementation of communications plan and social media strategy.
- Rebranding of MAC, and design and launch of new website.

MAC's advocacy in 2011 focused on many areas, among them competitiveness, regulatory review, infrastructure, innovation, human resources, geosciences, Aboriginal participation in mining, regulatory reform and issues related to corporate social responsibility.

FEDERAL ADVOCACY

General outreach to Members of Parliament, as well as grassroots lobbying was a priority in 2011. Reaching out to numerous MPs and committee members to ensure that MAC's issues were understood was an integral component of the government relations strategy. Throughout the year, MAC met with several MPs, committee chairs, party critics and key staff in a number of offices, including those of the Privy Council, the Prime Minister's Office, Natural Resources Canada, Fisheries and Oceans Canada, Environment Canada, Aboriginal and Northern Affairs Canada, the Department of Finance and others. MAC also made a presentation to the conservative mining and pipeline caucus which was followed by a Q&A and discussion with MPs.

MAC appeared before the House of Commons Standing Committees on the Environment and Sustainable Development, Finance, and Natural Resources regarding the *Canadian Environmental Assessment Act*, the federal budget, and mining in northern Canada, respectively.

ASSEMBLY OF FIRST NATIONS

In 2011, MAC, through the Mining Industry Human Resources Council (MiHR), continued to work with the AFN on the *Mining Essentials Skills Development Project*. The project resulted in the development of a 12-week entry level skills training standard and was developed in partnership with the AFN, the Inuit Tapiriit Kanatami and the Métis National Council. This marked the first time that the three organizations have

collaborated on this type of project. The program was piloted at three First Nations communities across Canada with great success. After completion, some participants have gone on to further post-secondary education, while others were able to secure mining industry employment. *Mining Essentials* training is now being delivered at a number of sites across the country.

MINING DAY ON THE HILL

The annual Mining Day on the Hill event was once again a highlight, providing an excellent opportunity for MAC members to connect with MPs. This year's event focused on the tremendous opportunities facing our sector and the challenges which need to be overcome to seize them.

In total, 54 MAC delegates attended the event in Ottawa, with 13 mining teams participating in 61 meetings. High-calibre meetings involved three ministers, several deputy ministers, assistant deputy ministers and MPs.

Once again, MAC partnered with the Economic Club of Canada for the annual luncheon. The Honourable Joe Oliver, Minister of Natural Resources Canada, was the keynote speaker.

The annual reception was, by all accounts, very successful. Attendees included numerous Ministers, MPs, Senators, senior officials and industry representatives. A new addition to the reception proceedings this year was the presentation of TSM awards.

SUPPORT FOR TSM

Throughout the year, the Public Affairs Committee supported the TSM initiative by attending various trade shows. MAC was part of the PDAC (Prospectors and Developers Association of Canada) Convention, the CIM (Canadian Institute of Mining, Metallurgy and Petroleum) Mining and Society Show, and the annual conference of the Canadian Aboriginal Minerals Association.

COMMUNICATIONS PLANNING AND IMPLEMENTATION

During 2011, MAC developed the communications plan which was approved late in the year. Following the completion of a rebranding exercise, a completely redesigned website (www.mining.ca) was launched in 2011. MAC worked to increase its visibility to media and the general public by holding events and by building relationships with key journalists. MAC also partnered with provincial mining associations in Ontario and Saskatchewan to hold luncheon events for media and industry guests in Sudbury and Saskatoon. These events resulted in substantial coverage in local and national media outlets, and are a logical complement to MAC's expanded media engagement efforts going forward. MAC also undertook a modest, Ottawa-centric advertising campaign in 2011 – a first for the Association! The ads, featuring the tagline "Before it's yours, it's mined", have elicited very positive feedback from parliamentarians, staffers and bureaucrats. On the social media front, MAC's twitter feed (@theminestory) has seen a steady increase in followers since its launch in mid-2011. In November 2011, the MAC Board approved a much-expanded communications plan to build on these efforts for 2012.

SCIENCE COMMITTEE

Chair: Kent England
Senior Environmental Scientist, Cameco Corporation

The Science Committee works to employ sound science towards minimizing the mining industry's impact on aquatic and terrestrial ecosystems.

HIGHLIGHTS

- After serving seven years as chair of the MAC Science Committee, Robert Prairie (Xstrata Zinc Canada) stepped down in June 2011, and Kent England (Cameco Corporation) assumed the role.
- MAC and the Mining Association of British Columbia (MABC) filed joint testimony and were granted intervener status in February 2011 in the Sandy Pond Alliance legal challenge against *Metal Mining Effluent Regulations* (MMER).
- Dialogue continued on issues related to the Metal Mining Environmental Effects Monitoring (EEM) program.
- Continued research and technology transfer through Mine Environment Neutral Drainage (MEND) program.
- Plans well advanced for ICARD conference to be hosted in Ottawa by MEND in May 2012.
- Release of second National Round Table on the Environment and the Economy (NRTEE) report on water and the natural resource sectors.

The Science Committee works in collaboration with the Environment Committee on a number of issues and initiatives. This includes MAC's advocacy work related to the *Fisheries Act*, the proposed national recovery strategy for boreal caribou, issues related to the *Species At Risk Act*, as well as the Towards Sustainable Mining initiative. For more details on all of these areas, please refer to the section on the MAC Environment Committee, and the *Towards Sustainable Mining Progress Report* on the MAC website (www.mining.ca).

During 2011, the Science and Environment committees met jointly in March, June and October. The Science Committee focused primarily on issues related to the Metal Mining Effluent Regulations (MMER), Environmental Effects Monitoring, and the Mine Environment Neutral Drainage (MEND) Program. The committee also reviewed the status of the draft Federal Wastewater Regulations, and continued to support studies on water quality and effluent toxicity.

METAL MINING EFFLUENT REGULATIONS (MMER)

The *MMER*, promulgated in 2002 under the federal *Fisheries Act*, apply to approximately 100 Canadian metal mines and facilities. The regulations impose effluent discharge limits for cyanide, arsenic, copper, lead, zinc,

nickel and radium-226, and prohibit the discharge of effluent that is acutely lethal to fish (rainbow trout). The maximum monthly mean concentration of total suspended solids has been set at 15 mg/L, and a pH range of 6.0 to 9.5 is required.

Under the *MMER*, the Governor-in-Council has authority to designate natural water bodies frequented by fish as tailings impoundment areas (TIAs) by amending Schedule 2 of the regulations. Such amendments are brought into effect only after a full environmental assessment has been done and all other tailings disposal options have been considered.

In February 2011, a notice was published in Part I of the *Canada Gazette* for Schedule 2 amendments for the Golden Band Resources Ltd. Central Jolu Mill Gold Project, which proposed the use of Mallard Lake, Saskatchewan as a TIA. The amendments were published in Part II of the *Canada Gazette* on September 29, 2011.

Early in 2011, Environment Canada (EC) published a draft document entitled *Guidelines for the Assessment of Alternatives for Mine Waste Disposal*. This is an updated version of a 2009 document entitled *Guidelines for the Assessment of Alternatives for Tailings Storage for Metal Mining Projects Proposing to use Natural, Fish-bearing Water Bodies as Tailings Impoundment Areas*. MAC responded to the updated draft pointing out misleading wording related to deleterious substances, waste rock and the application of the *MMER*. EC agreed with most of the issues raised by industry and the guidelines were subsequently revised to provide more clarity.

SANDY POND ALLIANCE LEGAL CHALLENGE

Throughout 2011, MAC worked jointly with MABC and our legal counsel to provide testimony in support of our motion for Intervener Status in the Sandy Pond Alliance legal challenge to the *MMER*. In June 2010, the Sandy Pond Alliance to Protect Canadian Waters—an environmental coalition—filed a legal challenge (Application) against the federal government. The coalition declared Sections 5 and 27.1 of the *MMER*, as well as Schedule 2, to be contrary to the *Fisheries Act* and *ultra vires* the authority of the Governor-in-Council.

The Application challenges the legality of using Schedule 2 to designate natural fish-bearing waters as TIAs, claiming it is impossible to compensate for the destruction of fish habitat in unique ecosystems such as lakes and other water bodies.

In September 2010, MAC and MABC jointly applied for intervener status, which was eventually granted in February 2011. On May 9, 2011, MAC and MABC filed witness testimony.

The objective of the MAC/MABC intervener status is to ensure that the court understands that industry worked closely with government for more than a decade on a number of government-led initiatives that culminated in the *MMER*. It is important that any court decision considers this perspective, as well as the

fundamental reason why, in rare situations, the use of natural water bodies is the safest option for tailings storage and that subaqueous deposition prevents the oxidation and mobilization of metals.

ENVIRONMENTAL EFFECTS MONITORING

The Metal Mining EEM program is a component of the *MMER* and was created by Environment Canada (EC) for two purposes. The first is to determine if the regulations are protective of the environment. The second is to require mine operators to conduct studies to assess effects potentially caused by mine effluent. The program is expensive, highly complex, multi-phased and comprises several years of field work and research. MAC is committed to working with EC to help improve the program by exploring new ideas and sound science.

In 2011, MAC Science Committee representatives met twice with EC's National Metal Mining Environmental Effects Monitoring (MM EEM) Team on March 24 and December 15. The March meeting focused on a number of issues related to the EEM program's administration and design. Agreement was achieved on only a few issues, but there was consensus that dialogue would continue. At the December meeting, the focus was on science-related issues and included participation by members of EC's Science Committee. The meeting's main purpose was to initiate 'negotiations' towards resolving statistical applications of sampling data related to the MM EEM program. The main topics included:

- Calculation of Effluent Dilution
- Calculation of the Bray Curtis Index
- Pseudo replication and the challenges of finding 'appropriate' reference sites
- Calculation of the Type I Error (alpha) when testing the Null Hypothesis

MAC presented a detailed analysis of the technical challenges mine operators in Canada face in the design and implementation of the EEM program. Top issues included the application of statistical methods for site design, the selection of effluent sampling locations and reference sites, and the interpretation of results.

We have indicated our intent to EC to follow-up on the above issues, as well as our outstanding concerns with the administration and design of the EEM program. Both EC and MAC have indicated their commitment to address ongoing issues related to the program during 2012.

MINE ENVIRONMENT NEUTRAL DRAINAGE (MEND) PROGRAM

Since the MEND program began in 1989, it has contributed enormously to understanding acidic drainage and its prevention, and to increasing the transfer of information and technology. Still, acidic drainage remains the most serious environmental issue facing the mining industry, government and the public, with potential liability reaching hundreds of millions of dollars. The mining industry continues to bear annual costs associated with treating acidic drainage.

Over the past several years, MEND has made great progress in addressing the research priorities identified by the Canadian mining industry; federal, provincial and territorial governments; and civil society. Along with research projects, MEND conducts technology transfer activities such as workshops, conferences, presentations and newsletters. It also transfers information through its website, www.mend-nedem.org.

The new MEND website was created in response to recent Treasury Board rules stipulating that all posted material be bilingual and in html format. The result was that a large portion of the material on the former MEND website did not qualify and had to be removed. The new site is an independent website that is located on an NRCan-managed server, but does not fall under Treasury Board rules. The general information on the site is bilingual; however, posting of English-only or French-only technical documents is also possible. The site was launched in March 2011 and more than 70 MEND reports are posted, with about 70 more to come. The reports can be downloaded free of charge.

THE GLOBAL ALLIANCE

MEND belongs to a Global Alliance for acidic drainage research that includes: the International Network for Acid Prevention (INAP); the US Acid Drainage Technology Initiative (ADTI); the Australian Centre for Minerals Extension and Research (ACMER); the Partnership for Acid Drainage Remediation in Europe (PADRE); the South African Water Research Commission (WRC); the South American Network for Acid Prevention (SANAP); the Chinese Network for Acid Mine Drainage (CNAMD); and the Indonesian Network for Acid Drainage (INAD).

Supported by major mining multi-nationals, the Alliance allows for better global sharing of information, pooling of resources and leveraging of funds. The synergies created by this global organization further underscore the importance of the MEND program.

PROJECT ACTIVITIES IN 2010-11

THE GARD GUIDE

The Global Acid Rock Drainage (GARD) Guide was officially launched in 2009. Sponsored by INAP with support from the Global Alliance, it describes proven techniques for characterizing, predicting, monitoring, treating, preventing and managing acidic drainage produced by sulphide mineral oxidation. It also addresses metal leaching. Several workshops have been held in Canada and internationally on the guide's use, which may be found at www.gardguide.com. In 2011, the guide continued to be revised and updated.

- **MEND Report 1.61.5b – Cold Regions Cover Research (November 2010)**

Contractor: SRK Consulting (Canada). MEND 1.61.5a (2009) reviewed soil covers on mine waste in cold regions. Several dozen cold region processes were identified that could affect soil covers. This report expands the study and provides recommendations for further research.

- **MEND Report 2.46.1 – Evaluation of the Water Quality Benefits From Encapsulation of Acid-Generating Tailings by Acid-Consuming Tailings (December 2010)**

Contractor: EcoMetrix Incorporated. The report investigated the benefits of encapsulation of acid-generating tailings by acid-consuming tailings as a strategy for water quality mitigation, including acid neutralization.

- **MEND Report 2.12.2b – Field Assessment of the Occurrence of Algal Biofilm on Submerged Tailings (November 2010)**

Contractor: NRCan MMSL-CANMET. Five subaqueous tailings disposal sites with different tailings composition and water depths located in an area extending from Val-D’Or to Elliot Lake were sampled to determine the effects of biofilm on metal mobilization.

- **MEND Report 1.61.7 – Climate Change and Acid Rock Drainage: Risks for the Canadian Mining Sector (October 2011)**

Contractor: Stratos Inc. This important report is a high-level risk assessment looking at the potential impacts that a changing climate has on water management structures and activities, waste impoundment structures, and on the hydrologic/hydrogeologic/geochemical conditions affecting the flow of water and contaminants at mine sites. Many future MEND projects could stem from this.

The 3rd MEND-CIM-Université du Québec en Abitibi-Temiscamingue (UQAT) Symposium on Mines and the Environment was held in Rouyn-Noranda from November 5-9, 2011. Registration totaled 320 delegates.

The 18th Annual BC-MEND ML/ARD Workshop was held on November 30 and December 1, 2011 in Vancouver. The theme was “Evolution of Mine Drainage Chemistry and Performance of Mitigation”.

MEND will host the 9th ICARD Conference in Ottawa from May 21-26, 2012. ICARD 2012 will continue its strong tradition as being the preeminent venue for leading-edge acidic drainage research. The conference will include short courses, three days of technical presentations, a trade show and field trips. Elizabeth Gardiner is the Conference Chair, with Gilles Tremblay (MEND Secretariat) and Craig Ford (Inmet Mining) as Technical Co-Chairs. Other members of the Core Committee are Bill Price (NRCan), Paul Younger (University of Newcastle, UK), Jim Robertson (Detour Gold), Janice Zinck (NRCan), Lisa Lanteigne (Vale), Marilyn Fortin (MAC), and Ellyn Holzman and Anne Chartrand of Unconventional Planning. The official website is www.icard2012.ca.

While a substantial portion of 2012 is being devoted to ICARD 2012, work continues on a number of existing projects to finalize them. These include:

- Role of Nitrate in the Remobilization and Attenuation of Selenium in Coal Mine Waste (Lorax Environmental)
- Aboriginal Affairs and Northern Development Canada (formerly INAC) is developing guidelines to assist with designing cover systems in cold regions. The department is working with MEND and the final report will be published as a MEND Report.

- Case Study Review of In-Pit Disposal of Tailings and Waste Rock (SENES Consultants)
- Assessment of Neutralization Sludges: Phase III (Lorax Environmental and University of New Brunswick)
- Review of Acidic Drainage Treatment and Sludge Management Operations (A Database) (NRCan)

The MEND program is highly respected in Canada and abroad. Currently, Canada is the only country addressing acidic drainage and metal leaching issues through a focused research program directed by a multi-stakeholder committee of representatives from industry, governments and non-governmental organizations. The program is administered by a small Secretariat at CANMET, part of Natural Resources Canada. Funds provided by MAC to support the MEND program are matched or exceeded by monies and/or in-kind contributions from other organizations on an annual basis.

NATIONAL ORPHANED/ABANDONED MINES INITIATIVE (NOAMI)

NOAMI was launched in 2002 in response to a request by federal, provincial and territorial Mines Ministers. It is a unique Canadian multi-stakeholder initiative—the work of which is guided by an advisory committee that includes representatives from the Canadian mining industry, federal, provincial and territorial governments, Aboriginal groups, and ENGOs (environmental non-governmental organizations). NOAMI is funded by MAC, the Prospectors and Developers Association of Canada, and federal, provincial, and territorial government departments. It is administered by a small Secretariat at CANMET, which is part of Natural Resources Canada.

HIGHLIGHTS 2011

- NOAMI Workshop—*Exploring the Management of Long-Term Liabilities and the Return of Mining Lands to the Crown in Canada*
- Annual General Meeting of the NOAMI Advisory Committee and Strategic Planning Session held in Ottawa in June.

ACTIVITIES IN 2011

Developing policy and program approaches for prevention of new orphaned/abandoned mines—the “Cowan Report”

One of the guiding principles for NOAMI is that “*Work toward eliminating future abandonments must continue, including the tightening of regulatory approaches.*” Members of the Advisory Committee believe that a policy void exists in the area of long-term closure, and that there is a need for a clear policy framework governing mine closure, long-term liabilities and return of lands to the Crown. Return of lands to the Crown after mining activities is a transfer of responsibility where the Crown assumes long-term care and management

of these lands. NOAMI has an interest in examining the return of lands to the Crown to provide certainty to governments, the mining industry and civil society on the terms and conditions where this could be possible. The intent is to avoid closed mines from becoming orphaned or abandoned.

In 2010, Cowan Minerals undertook a project for NOAMI to provide a policy framework and guidance document for stakeholders and mining jurisdictions to use as a reference in implementing mine closure, managing long-term liabilities and preventing future abandonment.

The report, *The Policy Framework in Canada for Mine Closure and Management of Long-Term Liabilities: A Guidance Document*, was produced. An excellent reference tool, it examines major components related to mine closure, and post-closure site management and associated liabilities. The report considers long-term care, monitoring and maintenance of mines that may cease to operate, and the options whereby mining jurisdictions may accept mining lands back to the Crown. It also includes a series of brief notes on potential policy elements, such as closure objectives, closure plans, risk assessment, financial assurance, post-closure care, relinquishment, institutional custodianship and consultation, from which guidance concepts for a policy framework may be developed. The Cowan Report goes on to present an actual policy framework as well as recommendations for preventing further accrual of abandoned mine hazards.

The authors conclude that “though much progress has been made in the last 40 years with mine rehabilitation, a challenge remains in planning for and regulating the post-mining long-term monitoring and maintenance phases to ensure against future abandonment of mines”.

NOAMI Workshop—Exploring the Management of Long-Term Liabilities and the Return of Mining Lands to the Crown in Canada

This workshop was held in Ottawa on May 31 and June 1, 2011, and was attended by 50 representatives from federal, provincial and territorial governments, the mining industry, non-governmental organizations, Aboriginal Canadians, consultants and academics. The workshop’s objective was to assist the NOAMI Advisory Committee in developing recommendations and a strategic roadmap on how to manage long-term mine site liabilities, and explore issues related to returning mining lands back to the Crown.

The workshop format consisted of presentations, panel discussions and small discussion groups on the themes of Site Risk Management, Funding, Legislation, and Policy and Regulations. The proceedings of the workshop are posted on the NOAMI website, www.abandoned-mines.org.

Annual General Meeting (AGM) and Strategic Planning Session

The NOAMI Advisory Committee’s AGM was held in Ottawa on June 1, 2011, immediately following the workshop described above. The agenda included a membership review, budget review, ongoing project updates, jurisdictional reviews, 2012 work plan and new directions for the future. Also, Gregg Stewart (British

Columbia) assumed the role of Chair, taking over from Robert Holmes (Yukon). Cindy Blancher-Smith from the Ontario Ministry of Northern Development and Mines has since been appointed as the new Vice-Chair.

On June 2, the Advisory Committee held a day-long NOAMI Workshop Post-Mortem and Strategic Planning Session. The purpose was to analyze the results of the workshop, develop a path-forward strategy for the return of mining lands to the Crown, and review NOAMI's overall strategic direction. In addition to developing a three-year action plan, a new NOAMI "Return of Lands to the Crown Task Force" was established to implement the plan.

The task force identified the need to develop further materials that would examine specific case studies and use the sum of information collected to establish a decision matrix (or tree). The matrix would outline the key factors that need to be assessed in determining if a site should be brought under government jurisdiction or remain the responsibility of the operator. A study will be commissioned that will support NOAMI in developing a policy framework that would address ultimate closure of mine sites, and long-term management and related liabilities. Responsibilities of mine operators and government regulatory agencies will also need to be clearly set out.

To this end, the task force will be seeking a qualified consultant/researcher with a strong mining industry knowledge and experience with the regulatory and policy environment around the management of contaminated sites, operating mines, and mine closures in Canada. The task force will report on progress at the next NOAMI AGM and to Mines Ministers in the fall.

National Roundtable on the Environment and the Economy (NRTEE)

In 2011, NRTEE continued a policy research program initiated in 2009 on Water and Canada's Resource Sectors. The Roundtable is assessing the challenges of water sustainability and water use by various resource sectors. Issues of changes in supply, availability and distribution impacted by climate change, as well as increasing demand are included in the assessment.

One of the program's main goals has been to consider developing new policy instruments, approaches and mechanisms by which water can be better managed to facilitate improvements in ecosystem health and the ongoing sustainability of resource sectors. In late 2011, the Roundtable published its second report – *Charting a Course: Sustainable Water Use by Canada's Natural Resource Sectors*. The report reviews water use of the various resource sectors, including mining, oil and gas, agriculture, manufacturing and thermal power generation. The mining sector is profiled as a very small user of water, accounting for only 1% of the national intake in 2005 with a general downward trend in consumption leading up to that year. A number of recommendations are presented for consideration in five general categories, including:

- Water Use Forecasting
- Water Data and Information

- Water Pricing
- Collaborative Water Governance
- Policy Instruments

Not all sectors were supportive of water pricing, but it was generally accepted that some form of water valuation would encourage more efficient and sustainable use. Regarding policy instruments, the development of flexible legislation and regulation adaptable to different circumstances is recommended. As such, provincial and territorial governments would take the lead. The federal government would assume a broader role and facilitate national access to provincial and territorial information portals. The report is available online at – [Charting a Course: Sustainable Water Use by Canada's Natural Resource Sectors.](#)



TAILINGS WORKING GROUP

Chair: Rick Schwenger
Project Manager, Reclamation, Xstrata Zinc Canada

The Tailings Working Group (TWG) works collaboratively to improve tailings management at MAC member facilities, as well as within the broader Canadian mining industry. The TWG reviews the management of tailings and mine waste to develop industry guidelines for the safe and environmentally responsible operation and management of tailings and water management facilities. It also promotes effective facility management and risk assessment throughout the mining industry. The TWG has also made a substantial contribution to MAC's Towards Sustainable Mining (TSM) initiative, particularly in the development of the tailings management protocol.

HIGHLIGHTS

- Delivered four tailings management workshops during 2011
- Updated and clarified definitions related to tailings facilities
- Plans for additional workshops during 2012

The most significant and visible work of the TWG to date has been the development of MAC's trilogy of tailings management guides:

- *A Guide to the Management of Tailings Facilities (1998, 2009)*
- *Developing an Operation, Maintenance and Surveillance Manual for Tailings and Water Management Facilities (2003)*
- *A Guide to Audit and Assessment of Tailings Facility Management (2010)*

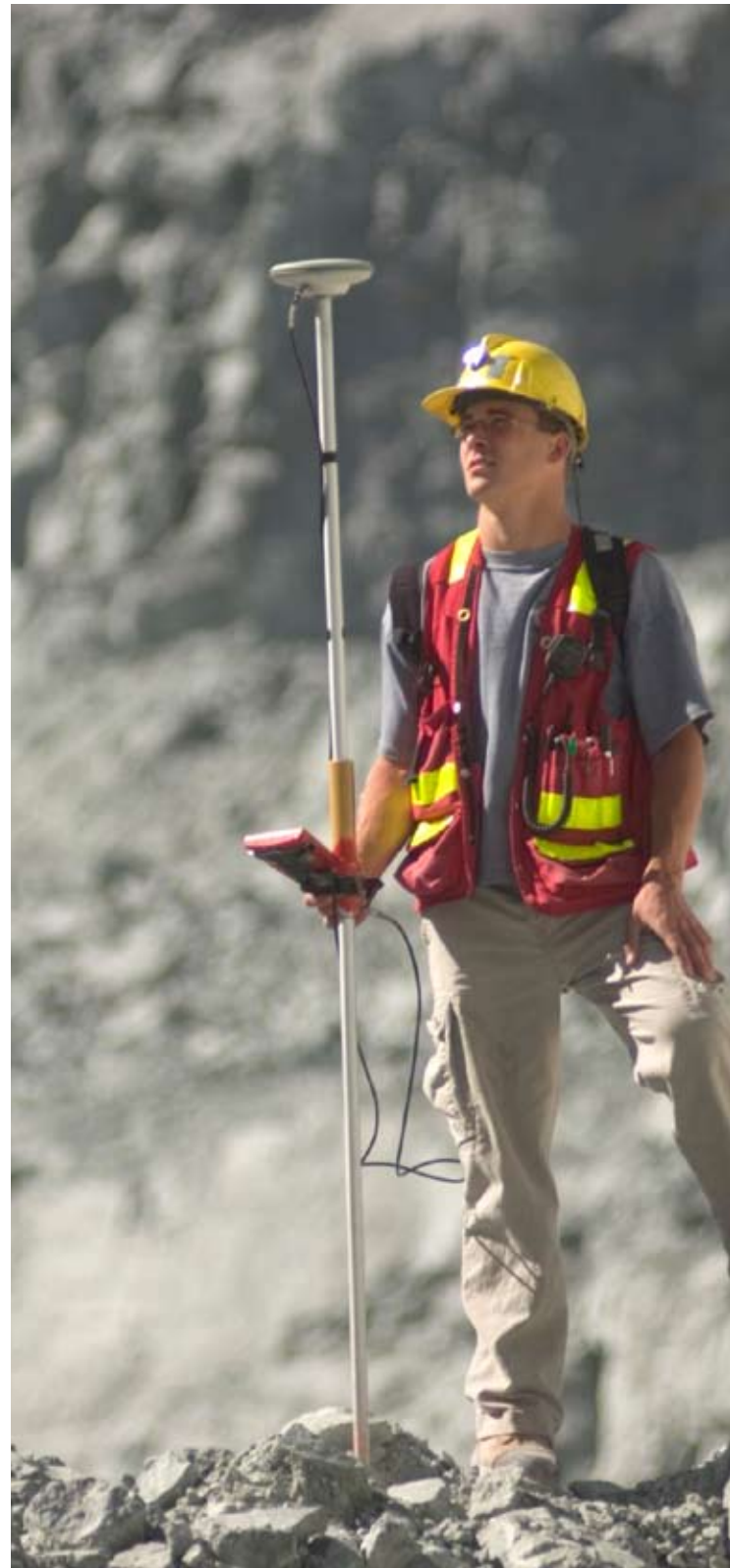
The guides provide a basis for responsible tailings management for the full life-cycle of an operation, from conception and design to final closure. In 2011, with the enthusiastic participation and generous support of MAC member operations, the TWG delivered four tailings management workshops (listed below) in four provinces across Canada. The primary objective of the workshops has been to promote the implementation and use of the guides.

- May 1-2, 2011: Joint Workshop with the Mining Association of British Columbia, Highland Valley Copper, BC
- May 25, 2011: MAC Workshop, CIM Annual Convention, Montreal, QC
- June 23, 2011: MAC/Oil Sands Workshop, Fort McMurray, AB
- October, 20, 2011: MAC Workshop, Canadian Dam Association Annual Convention, Fredericton, NB

The workshops are intended to help prepare MAC members to meet their commitments under TSM, as well as the Association's commitment to sustainable development through better environmental and safety

performance. The workshops also help maintain dialogue on new technology and support among industry experts in the field.

Although the TWG prepared the guides for MAC members, we encourage their application throughout the mining industry in Canada and elsewhere. They have earned international recognition for setting the highest global standards for tailings management.



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

HIGHLIGHTS

- Provided input to the federal budget through pre-budget submissions, mines ministers briefings and other activities
- Advocated for maintaining corporate tax rate reductions
- Continued to examine the at-depth exploration/development issue
- Conducted annual ENTRANS study of mining industry payments to Canadian governments

In 2011, the economic focus of the federal government was on reducing the deficit accrued during the previous two stimulus budgets. However, thanks to various pre-budget submissions, mines ministers briefings and other activities undertaken in recent years, MAC and the Taxation Committee welcomed the following improvements announced in federal budgets and other vehicles:

- Continued reduction of the corporate income tax rate from 16.5 percent to 15 percent by 2012, completing a decade-long reduction program begun by the Liberal government and continued by the Conservative government.
- The extension of the 15 percent Mineral Exploration Tax Credit for an additional year. Funds raised until March 31, 2012 can support eligible exploration until the end of 2013.
- Setting aside \$150 million toward construction of an all-season road between Inuvik and Tuktoyaktuk to effectively complete the Dempster Highway, a priority of the NWT government.
- Investment of \$100 million over five years in geological mapping, primarily in Canada's North, and renewal of a smaller related program aimed at geoscience around mining camps.
- Formal interpretation of the tax treatment of costs of certain tangible properties in underground mines consistent with that sought by MAC
- Classification of certain consultation, environmental and feasibility expenses as eligible for Canadian exploration expense treatment
- Significant investment in infrastructure, which may include projects directly linked to mineral development
- Creation of a regional development agency for the North and investment of \$100 million in an Aboriginal skills initiative

Canada faces declining reserves, but more are believed to be available at-depth near existing mines. Natural Resources Canada and MAC members have examined the risks and returns of related activities to determine whether tax changes are warranted. Given the government's current budgetary priorities, there is unlikely to be any positive change in this area in the foreseeable future.

ENTRANS 2011 STUDY

ENTRANS completed a fifth annual study for MAC of the mining industry's payments to governments. The industry paid \$8.4 billion in taxes and royalties to governments in 2010, up 65% from the recession-related 2009 figure. Several provincial governments continue to derive significant revenues from the industry. MAC was successful in generating good media pick-up on this study.

The publication highlighted the mining industry's role in specific regions of Canada. It found the industry has become a significant contributor to government revenues in Newfoundland and Labrador, New Brunswick, Manitoba, Saskatchewan, Alberta, British Columbia and the Northwest Territories.

Mining contributes a considerable sum to governments in the form of municipal taxes, fuel taxes and payroll taxes. In addition, the industry buys a significant amount of goods and services from an estimated 3,200 supplier companies in Canada, ranging from engineering and environmental consultants to equipment companies and financial firms.



The Transportation Committee contributes to the federal policy, legislative and regulatory environment for the transport of minerals and metals to enhance the competitiveness of Canada's mining industry.

HIGHLIGHTS

- Constructive federal response to the review of freight rail service levels
- Participation in alliances such as the Coalition of Rail Shippers to seek competitive transportation infrastructure
- Dialogue with the federal government on transportation infrastructure issues

Each year, Canadian exports of aluminum, gold, nickel, copper, zinc, iron ore, coal, uranium, potash and diamonds amount to tens of billions of dollars. These mineral and metal products account for much of the volume handled at Canadian ports and around half of total rail freight revenue.

A low-cost, efficient system of marine, rail and truck transportation is essential to the Canadian mining industry's competitiveness. MAC and the industry were, therefore, pleased when the *Canada Transportation Act (CTA)* was amended in 2008 to better balance the competitive situation between shippers and railroads. The latter of which enjoys a monopoly or dual monopoly in many regions of the country. The amended CTA strengthens the ability to arbitrate disputes over rail fees and ancillary charges.

RAIL FREIGHT SERVICE REVIEW

Recently, the federal government has been studying the level of freight rail service provided by CN and CP to identify problems and issues, examine best practices, and recommend commercial, regulatory or other remedies to improve service. The government commissioned four studies and established a three-person panel to review the information and conduct its own consultations before making recommendations to the government. MAC met with Transport Canada officials and consultants to provide input from the mining industry.

The final consultant's report, *Analysis of Railway Fulfillment of Shipper Demand and Transit Times*, was released in March 2010. During the same month, the federal government issued its response. MAC is generally pleased with the response as it is constructive and contains useful elements related to rail service, non-performance penalties and metrics for ongoing measurement.

Stemming from the report's recommendations, the government facilitated a commercial process to negotiate a template service agreement and a commercial dispute resolution mechanism. Jim Dinning

was appointed to lead this process in November 2011. MAC, along with Teck Resources, met with Jim Dinning on November 16 to discuss the plans for his review. A task force was subsequently struck, including representation from Xstrata and Teck.

In pushing for an effective review of freight rail service, and for the earlier *CTA* amendments, MAC has been involved in the Coalition of Rail Shippers. This coalition advances shippers' interests in the area of federal regulatory and policy decisions. It represents sectors that are large users of rail service, including the chemical, fertilizer, propane, forest products, agri-food, mining and import auto industries.

INTERNATIONAL MARITIME ORGANIZATION

The International Maritime Organization (IMO) is the United Nations' specialized agency responsible for the safety and security of shipping and the prevention of marine pollution by ships. Recently, two regulations have emerged that certain MAC members need to be aware of and comply with:

- MARPOL Annex V, which aims to prevent pollution of the marine environment; and,
- IMSBC code, which works to ensure the safe transport of solid bulk cargoes.

MARPOL is short for the International Convention for the Prevention of Pollution from Ships. Annex V is specifically focused on the treatment of ship garbage. Cargo residues, according to MARPOL, are a form of garbage and are dealt with in Annex V. Recently, amendments to Annex V have created a new set of criteria determining that certain cargo residues are no longer allowed to be discharged into the sea as of January 1, 2013. Instead, dry residues and/or wash water containing residues meeting any of the criteria will have to be discharged at port reception facilities, thus potentially hampering trade and complicating the shipping element of the logistics supply chain.

IMSBC is short for the International Maritime Solid Bulk Cargoes Code, and recently, criteria have been proposed to identify "Materials Hazardous Only in Bulk Form" (MHB). The criteria are scheduled for adoption at the IMO Sub-Committee on Dangerous Goods in the fall of 2012, and will come into force on January 1, 2015. As a result, any metal ore or concentrate cargoes meeting any of the MHB criteria will have to be shipped according to the IMSBC schedule for "metal sulphide cargoes".

MAC has been following these issues at the IMO closely and has established a working group with interested member companies to strategize and determine the best course of action going forward.

During the year, MAC continued its dialogue with the federal government on transportation infrastructure issues. Of particular importance are projects that could open up regions of Canada to enhanced mineral exploration and economic development.

To address other issues, a member of the MAC Transportation Committee sits on the federal government advisory committee that deals with Transport Canada concerning the transportation of dangerous goods. MAC is also monitoring an environmental regulatory initiative in the northern US states that could impact Seaway and Great Lakes shipping.



INTERNATIONAL SOCIAL RESPONSIBILITY (ISR) COMMITTEE

Chair: Craig Ford
Vice President, Inmet Mining

The increasing focus on the practices of the Canadian mining industry operating internationally resulted in the International Social Responsibility (ISR) Committee's establishment in 2011. The ISR Committee's mandate is to identify and address evolving issues that can impact the reputation of MAC member companies operating abroad and to commission expert reviews of evolving best practice to determine whether MAC should formulate policy positions on certain matters.

HIGHLIGHTS

- Ross Gallinger was selected as the inaugural Chair of the ISR Committee and it was under his leadership that much of the scope of the four work areas developed. Ross stepped down after his appointment as Executive Director of PDAC though he remains an active participant and leader in the ISR Committee work.
- The ISR Committee identified four work streams and subsequently commissioned two research projects in 2011:
 - 2006 National Roundtables on CSR and the Canadian Extractive Industry in Developing Countries: Review government and stakeholder actions to implement the recommendations from the National Roundtables (2006) on Corporate Social Responsibility and the Canadian Extractive Industry in Developing Countries.
 - Accountability Mechanisms: Identify existing accountability mechanisms in Canada and other select countries, and identify weaknesses and gaps associated with these mechanisms.
- The ISR Committee's establishment also allows MAC to engage in emerging issues related to international social responsibility and avoid being caught off guard by issues. A notable example is Bill C-300—a private members bill that was narrowly defeated in the last Parliament and would have been very problematic for the mining industry. This proved very useful mid-way through 2011 when John McKay approached MAC about Bill C-300, which proposed to require extractive companies to report on payments to foreign governments. The ISR Committee was able to carefully consider Mr. McKay's request and develop a proactive engagement strategy on this topic of transparency reporting with respect to payments to governments.

2006 NATIONAL ROUNDTABLES ON CSR AND THE CANADIAN EXTRACTIVE INDUSTRY IN DEVELOPING COUNTRIES

In 2011, the ISR Committee contracted On Common Ground to review, identify and understand the actions taken by government and other stakeholders subsequent to the 2006 multi-party report to implement the

Roundtables' recommendations, as well to identify current gaps. MAC accrued considerable goodwill for taking on this useful follow-up to the Roundtables and this action has created space for further dialogue. The completed report was made available on the MAC website (www.mining.ca) in January 2012.

ACCOUNTABILITY MECHANISMS

In 2011, the ISR Committee retained Fasken Martineau to identify existing accountability mechanisms in Peru, Papua New Guinea, Tanzania and Guatemala, and to contrast those in place in Canada. The work's primary conclusion is that although the details of accountability vary from country to country, such mechanisms are in place in all countries. The difference lies in how such mechanisms are enforced by host country governments. The final report has been posted on the MAC website (www.mining.ca).

PLANS FOR 2012

The ISR Committee will commission two additional research projects:

- **Transparency:** This project will analyze how companies can better incorporate the tenets of transparency into their business. In doing so, companies can improve their disclosure practices to meet basic compliance and reporting standards. The project will also focus on emerging expectations in four areas:
 - Payments to governments;
 - Human rights;
 - Community and broader economic benefit; and
 - Consultation with Indigenous peoples.
- **Application of the Principle of Free, Prior and Informed Consent (FPIC):** This project will document the current state-of-the-art application FPIC globally. It will answer such questions as:
 - How do companies seek and demonstrate FPIC?
 - How do companies know when they have achieved FPIC?
 - What does FPIC mean for indigenous communities?
 - What does FPIC mean for non-indigenous communities?
 - What does FPIC mean when relocation is involved?
 - What does FPIC mean when relocation is not involved?

The ISR Committee will continue ongoing dialogue to identify and discuss issues relevant to the international corporate social responsibility performance of MAC members. It will also seek to identify further initiatives, in addition to the above stated research projects, to help raise awareness and performance standards.

MAC will continue to work on the international application of the Towards Sustainable Mining (TSM) initiative to determine if solutions can be found for current barriers.

In 2012, the ISR Committee will advance work on a Big, Bold Initiative (BBI). The BBI will reinforce MAC member commitment to continuously raise the bar on international corporate responsibility. This initiative will also help deliver improved reputation and competitive advantage for MAC member companies.

The ISR Committee meetings were well attended in 2011. The high degree of engagement is a testament to the enthusiasm members feel about addressing new challenges and extending leadership—always with a clear business case in mind. The atmosphere is reminiscent in many ways of the early days of TSM when we were also committed to establishing a leadership position. TSM has built tangible value for MAC and we firmly believe that the work of the ISR Committee will do the same. We look forward to an exciting year in 2012!



The Energy Committee promotes overall energy management, including improved energy efficiency and greenhouse gas intensity performance.

HIGHLIGHTS

- Monitored government progress on setting targets and regulations for GHG emissions.
- Continued measuring and reporting GHG emissions of MAC member companies.
- Improved company results under the TSM energy/GHG performance element.
- Review of the Towards Sustainable Mining (TSM) energy use and greenhouse gas emissions management protocol.

The Energy Committee encourages continuous improvement in energy efficiency and reducing GHG emissions among MAC members. Every year, the Committee engages the Canadian Industrial Energy End-Use Data and Analysis Centre (CIEEDAC) to prepare industry data on energy, and GHG consumption and emissions. MAC also participates in the Canadian Industry Program for Energy Conservation (CIPEC), and serves as Chair of the Mining Sector Task Force.

In response to slower improvement than expected amongst member companies in the area of Energy Use and Greenhouse Gas Emissions Management, the Energy Task Force commissioned a review of the TSM protocol to determine the root cause for weak improvement. The review looked at both the contents of the protocol, as well as training and support relevant to energy and greenhouse gas management offered by MAC. The review's findings suggested that the protocol should be updated to reflect the current state of climate change mitigation policy and practice to ensure that it remains relevant. Based on this finding, in 2011, the Energy Task Force initiated a process to update the energy use and greenhouse gas emissions management protocol.

Climate change remains a prominent issue in both the political and policy context. In recent years, climate change has been the subject of a drawn-out legislative and regulatory process in Canada.

In 2006, the federal government tabled Bill C-30, *Canada's Clean Air Act*, which proposed to regulate air pollutants and GHG emissions. MAC and its members were involved in consultations on the bill and appeared before the parliamentary committee studying it in February 2007. At the committee stage, opposition parties proposed more than 100 amendments, and the bill was allowed to die.

In April 2007, the government announced a new regulatory framework, "Turning the Corner," to replace the proposed legislation. The new framework required an 18 percent improvement in GHG intensity between 2007 and 2010. Within the mining industry, this target applied to base metal smelters and iron ore pellet plants.

In 2009, the government delayed the development of the GHG regulatory process until GHG targets, policies and tools were developed in the United States. At the end of 2010, it was still unclear what, if anything, might emerge from the US Congress and administration on climate change. Canada's plans also remain unclear, although regulatory announcements have been made concerning standards for vehicle fuel efficiency and coal-fired power plant efficiency.

While Copenhagen negotiations failed to reach binding agreement on GHG reduction targets, there was agreement to transfer \$30 billion in mitigation funds to developing countries by 2012 and to develop a new funding mechanism to help reduce deforestation. Canada subsequently submitted its formal GHG reduction target as called for in the Copenhagen Accord (2020 GHG emissions 17% below 2005 emissions). Finally, in late 2011, Canada signalled that it would withdraw from the Kyoto Protocol agreement.

Throughout this long process, MAC has highlighted the importance of global competitiveness, the uniqueness of specific facilities and situations, and members' progress on energy efficiency and GHG reduction. MAC has also informed the federal government that the mining industry seeks a simple, low-cost, single-window reporting system under the federal GHG regulatory regime. Given the many different targets and tools that have emerged at the provincial level in recent years, it is clear that developing a national policy and reporting system will be difficult.

MAC and the Energy Committee continue to emphasize the role that energy efficiency and process investment could play in dealing with climate change, clean air and productivity issues. To that end, MAC has highlighted the usefulness of federal incentives and programs for energy efficiency.

MAC members continue to inventory, measure and report on their climate change actions, positioning the industry well for any future reporting requirements.

MAC engaged Stratos sustainability consultants to refresh the Towards Sustainable Mining (TSM) Guidance document pertaining to the greenhouse gas and energy management protocol. The finished document includes updated information to help participating companies to better complete TSM forms regarding energy management best practices. Efforts to further improve performance in this area continue.

OTHER WORK AREAS



INTERNATIONAL TRADE AND INVESTMENT

MAC monitors and participates in government trade activities and works to promote open flows of trade and investment to enhance the international competitiveness of the Canadian minerals and metals industry.

HIGHLIGHTS

- Support for federal government's foreign investment protection agreements.
- Support for negotiation of free trade agreements.
- Monitoring of developments, with input provided as appropriate.

The mining industry ranks alongside financial services and oil and gas as the most international of Canada's industry sectors. The Canadian mining industry accounts for about 20 percent of all Canadian goods exported, 12 percent of Canada's stock of direct investment abroad and some 60 percent of the world's mineral exploration companies. Three-quarters of the world's mining equity financing transactions are handled through the Toronto Stock Exchange. Billions of dollars in annual export revenues come from each of iron and steel, aluminum, nickel, copper, gold, uranium, coal, potash, zinc, diamonds and iron ore.

This success is influenced in part by a network of government support delivered through Canada's "trade infrastructure"--the overseas network of embassies and trade commissioners, the trade finance capacity through Export Development Canada, and an array of free trade agreements and foreign investment protection agreements (FIPAs).

FIPA

In recent years the federal government has adopted an ambitious agenda to broaden and modernize this infrastructure. For example, the government aims to double the number of FIPAs in place, from 23 to 46, over a five-year period.

FIPAs are bilateral agreements that place investment-treatment obligations on each country. They also give foreign investors access to independent rules and arbitrators should disputes arise between the investor and the host government. These mechanisms provide Canada's overseas investors with an added layer of security and, while the enforcement components are rarely used, the mere existence of a FIPA gives foreign governments a set of rules on fairness and transparency.

FIPAs with India, Jordan, Madagascar and Kuwait have recently been concluded by the Federal government, including Mali, Romania and Latvia most recently in 2011. Negotiations with China, Indonesia, Mongolia,

Poland, Tanzania, Vietnam, Bahrain and Tunisia are ongoing. In some of these cases, the mining industry has been the main impetus for launching the negotiations. Chinese relations are particularly important. China now represents over 30 percent of world demand for metals, compared to around 5 percent in the 1980s.

Negotiations are also being explored, or are in progress, with Malaysia, Kazakhstan, Ghana, Rwanda, Nigeria, Mali, Cameroon, Zambia, Botswana, United Arab Emirates, Saudi Arabia and Cuba.

FREE TRADE AGREEMENTS

In the broader area of free trade agreements, the government has begun negotiations towards a comprehensive economic agreement with the European Union. MAC participated in a roundtable discussion with officials on this subject in April 2011. This has been an extensive undertaking that the government has made a priority partnership. Negotiations for a Canada-India free trade agreement is in its early stages also.

During the Asia-Pacific Economic Cooperation (APEC) Leaders' Summit in Honolulu, the government indicated Canada's interest in joining the Trans-Pacific Partnership (TPP) negotiations. The current TPP members are: Australia, Brunei Darussalam, Chile, Malaysia, New Zealand, Peru, Singapore, the United States and Vietnam. Canada will embark on consultations with all nine TPP members with a view to joining the negotiations.

Free trade agreements with Peru and Colombia are particularly relevant to the mining industry. Successful agreements with these countries can help mining companies by lowering their cost of imports, minimizing technical barriers, enhancing investment security and improving regulatory cooperation. Although negotiations concluded with Colombia in 2008, the Canada-Colombia Free Trade Agreement only came into force in 2011.

In August 2011, the Prime Minister announced the conclusion of free trade negotiations with Honduras. Canadian and Honduran officials met several times during the negotiations stage, including in Ottawa in December 2010, in Tegucigalpa, Honduras in February 2011, and again in Ottawa in July 2011. Following these discussions, MAC met with the Honduran Ambassador, who was very interested in obtaining advice and support to help develop Honduras' mining sector.

MAC remains actively engaged with the federal government on a range of international trade and investment issues, and will remain involved in files such as the Canada-EU CETA agreement as it draws nearer to completion. MAC will closely monitor (with interventions as needed) other trade-related issues, such as progress in the multilateral WTO Doha Round negotiations and implementation of policy responses on the issue of international corporate social responsibility.

In its meetings and discussions with foreign governments, MAC typically highlights the importance of efficient regulatory processes, modern infrastructure, investment in geological mapping and openness to

foreign investment. Two-way flows of foreign investment can provide important conduits for gaining access to new technology, management skills and foreign market opportunities.

COMBATING PROTECTIONISM

MAC has also been involved in OECD discussions concerning trade in raw materials and the emergence of trade barriers. There are growing signs of protectionism in countries like China, which has introduced export taxes and other barriers to enhance the flow of raw materials to the domestic market for value-added purposes. The US, the EU and Mexico launched a challenge against China at the World Trade Organization because of these practices. Canada and other countries have joined the challenge as third parties.

In July, the World Trade Organization (WTO) released a report stating that China's export restrictions on nine raw materials - alumina, fluorite, manganese, metallic silicon, carborundum, yellow phosphorus, zinc, coke and magnesium - are inconsistent with WTO regulations. This indicates that China has lost the first round of the battle on export restrictions on raw materials.



MINING INDUSTRY HUMAN RESOURCES COUNCIL

Executive Director: Ryan Montpellier
Board Chair: Patricia Dillon

The Mining Industry Human Resources Council (MiHR) is the national human resources sector council for Canada's mining industry. It collaborates with communities of interest to identify and address human resources challenges facing the minerals and metals sector.

ADDRESSING THE HR CHALLENGES OF INDUSTRY

MiHR contributes to the strength, competitiveness and sustainability of the Canadian mining sector by leading the collaboration of industry stakeholders in the development of solutions to national HR challenges. The Council is governed by an 18-person Board of Directors that provides direction and support to ensure that the stated mission, values and activities deliver tangible results for industry. Members of the Board of Directors represent a cross-section of mining industry employers, organized labour, mining associations, equity groups and post-secondary educators from across Canada.

MiHR projects are executed within a strategic plan which comprises three key priority areas:

1. Attraction, Retention, Transition
2. Skills, Learning, Mobility
3. Research for Industry Sustainability

STRATEGIC PRIORITY: ATTRACTION, RETENTION, TRANSITION (ART)

This priority requires MiHR to address several labour market issues identified in previous research. Specifically addressing the lack of diversity, the anticipated skills shortage and the misconceptions widely held by youth, parents, educators and career counsellors about working in the Canadian mining industry. Activities in this area help:

- Address attraction, retention and transition challenges
- Raise awareness among industry stakeholders about the sector's career opportunities
- Diversify the workforce by increasing underrepresented groups (women, Aboriginal peoples, New Canadians, etc.)

HIGHLIGHTS OF 2011

- **Mining Essentials (ME):** The program provides Aboriginal peoples with the skills and confidence needed to enter the mining workforce. In turn, this provides industry with a ready-to-work, local workforce, based on a nationally validated pre-employment program, in partnership with the Assembly of First Nations (AFN). In 2012, program delivery will be made in partnership with industry and Aboriginal partners in various areas of Canada.

- **Explore for More Earth Sciences and Mining Career Outreach Project:** The project's aim is to increase earth sciences and mining career awareness through the production and dissemination of career resources (e.g. Facebook pages, Explore for More Career Kits, Explore for More YouTube channel, www.acareerinmining.ca website and Virtual MineMentoring Program). In the last year, 3,000 kits were distributed to schools and Aboriginal communities. Additionally, MiHR attended 10 career events and 80 mentor/mentee pairs passed through the program.

STRATEGIC PRIORITY: SKILLS, LEARNING AND MOBILITY (SLM)

This priority area addresses the mining sector's needs related to labour mobility, skills recognition and the harmonization of training across Canada. Over the past six years, MiHR and industry partners have been developing the Canadian Mining Certification Program (CMCP). This program will contribute to an appropriately skilled, effective and mobile mining workforce.

HIGHLIGHTS OF 2011

- **The Canadian Mining Certification Program:** In 2012, the Canadian Mining Certification Program will be implemented at 12 sites in British Columbia, Northwest Territories, Manitoba, Ontario, New Brunswick and Newfoundland.

The current profile of the Canadian labour market means that increasing workforce diversity and attracting new talent will only partially offset the impact of the aging workforce. Among the different broad occupational categories, the hiring requirements are highest for Trades and Undesignated Occupations at 35,625.

Since May 2008, MiHR and industry partners have been developing National Occupational Standards in the undesignated occupational areas of Surface Mining, Underground Mining, Minerals Processing Operations and Diamond Drilling. These National Occupational Standards form the basis of the Canadian Mining Certification Program made nationally available in 2012 after pilots were completed at seven mine sites across Canada.

The Canadian Mining Certification Program will be implemented in 2012 at 12 sites in British Columbia, Northwest Territories, Manitoba, Ontario, New Brunswick and Newfoundland. Employers will use the program to enhance their ability to move skilled miners from one site to another across Canada and many site-level training departments have already begun realigning their in-house training programs to ensure that new hires will qualify for the nationally recognized certification, and enable gap analysis of new hires for efficient on-boarding.

STRATEGIC PRIORITY: RESEARCH FOR INDUSTRY SUSTAINABILITY (RIS)

This priority area addresses the lack of up-to-date labour market information (LMI) on the Canadian mining industry. By conducting research-based activities and disseminating the findings, MiHR provides valuable intelligence to our stakeholders and ensures that our programming is responsive to industry needs. The research stemming from these activities enable the sector to proactively address labour market challenges such as recruitment, retention, diversification and training.

By identifying labour market supply and demand gaps, industry and other stakeholders can take practical measures to ensure that the risks associated with a labour shortage (or surplus) can be mitigated.

HIGHLIGHTS OF 2011

- **The Mining Industry Workforce Information Network (MIWIN):** The Network forecasts future hiring requirements in the sector by occupation and region based on fluctuations in commodity prices — the largest driver of employment. National labour market reports and recommendations are issued annually from this system, which is recognized as the go-to resource for mining labour market information. The hiring requirements model continues to be further refined, and talent availability (or labour supply) forecast and recommendations will be made available mid-2012.
- **Sector Studies on Highly Qualified People and Exploration:** In 2011, a study on Highly Qualified People in the mining sector was conducted in partnership with the Canada Mining Innovation Council (CMIC). A study on the labour market challenges in the mineral exploration sector was also conducted in collaboration with the PDAC and AMEBC. The final reports and recommendations from the strategy sessions are published on www.mihr.ca. Each study resulted in a comprehensive report, executive summary, and a webinar on key findings. Communications and stakeholder consultations on outcomes and next steps will continue throughout 2012. Presentations on both reports were made to various groups, including during the AMEBC Roundup, CMIC's signature event and the PDAC Conference.
- **Custom Research:** Research activities for co-funded, custom LMI research projects have been conducted in Saskatchewan, the Yukon and northwestern Ontario. A new labour market research project is underway in British Columbia in partnership with the BC Mineral Sector Labour Shortage Taskforce.

A YEAR OF CHANGE FOR MIHR

As Canada's mining HR council, MiHR is an industry-driven organization that collaborates with a wide spectrum of industry stakeholders including Canadian mining employers, organized labour, educational institutions, and Aboriginal communities to develop and implement solutions to the industry's national HR challenges.

In 2011, in an effort to reduce public spending, the federal government announced the abolishment of the Sector Council Program and substantial changes to the funding for all sector councils including MiHR. As a result, effective March 31, 2013, MiHR will lose a portion of its dedicated funding.

In response to this announcement, and to continue to serve and meet the needs of industry, MiHR began a consultation process with stakeholders towards the end of 2011. In the first phase of the consultation, the results and priorities of industry were clear and cited three areas that are irreplaceable if MiHR were not to produce them: labour market intelligence, career awareness and worker certification. Overall, interviewees saw MiHR as a provider of critical information for addressing the human resources challenges facing the mining and minerals sector. It was also noted that MiHR provides human resources within the industry with a unified voice.

Through 2012, MiHR will continue to consult with the mining sector (in particular with MAC members) to ensure its programs and services remain relevant and sustainable. MiHR is also focusing its activities on core, highly-valued programs. For more information on MiHR or any of its projects, visit www.mihhr.ca or contact Ryan Montpellier, Executive Director, at RMontpellier@mihhr.ca.

DIRECTORS & COMMITTEES



MAC BOARD OF DIRECTORS

Chair: Douglas Horswill, Teck Resources Limited

Chair: Douglas Horswill, Teck Resources Limited

Jason Aagenes, Wabush Mines
Gordon Ball, Syncrude Canada Ltd.
Linda Broughton, BHP Billiton Base Metals
Chris Carkner, Royal Canadian Mint
Jim Carter*
Tim Cutt, BHP Billiton Canada Inc.
Kelvin Dushnisky, Barrick Gold Corporation
Craig Ford, Inmet Mining Corporation
Robert Gallagher, New Gold Inc.
Louis-Philippe Gariépy, Xstrata Copper Canada
Pierre Gratton, Mining Association of Canada
Ron Greenway, Teck Resources Limited
Louise Grondin, Agnico-Eagle Mines Limited
Tony Guthrie, De Beers Canada Inc.
Alan Hair, HudBay Minerals Inc.
Chris Hanks, Newmont Hope Bay Mining Ltd.
William James*
John Kearney, Canadian Zinc Corporation
Norman Keevil*
Rod Lamond, Nyrstar Canada (Holdings) Ltd.
Stephen Leahy, North American Tungsten Corporation Ltd.
Pierre Lebel, Imperial Metals Corporation
John McManus, Taseko Mines Limited
Serge Miller, ArcelorMittal Mines Canada
Tom Paddon, Baffinland Iron Mines Corporation
Ian Pearce, Xstrata Nickel
Mac Penney, Kinross Gold Corporation
John Rhind, Shell Canada Energy Inc.
Ethan Richardson, Shore Gold Inc.
Walter Sencza, Newmont Canada Corporation
Bob Steane, Cameco Corporation
Gordon Stothart, IAMGOLD Corporation
Anne Marie Toutant, Suncor Energy Inc.
Mark Travers, Vale
Zoe Yujnovich, Iron Ore Company of Canada

* Honorary Life Members

MAC BOARD OF DIRECTORS – ALTERNATES

Manuel Alvarez Davila, Xstrata Zinc Canada
Manon Beauchemin, Iron Ore Company of Canada
Alain Cauchon, ArcelorMittal Mines Canada
Steve Flewelling, Xstrata Nickel
Kara Flynn, Syncrude Canada Ltd.
Byng Giraud, Imperial Metals Corporation
Alanna Heath, Barrick Gold Corporation
Scott Herr, Inmet Mining Corporation
Joseph Lanzon, Canadian Zinc Corporation
Benjamin Little, IAMGOLD Corporation
Darrell Martindale, Shell Canada Energy Inc.
Ross McElroy, Suncor Energy Inc.
Cory McPhee, Vale
Greg Missal, Baffinland Iron Mines Corporation
John Mullally, Vale
Al Shpyth, Cameco Corporation
Marcia Smith, Teck Resources Limited
Steve Thomas, De Beers Canada Inc.

EXECUTIVE COMMITTEE

Kelvin Dushnisky, Barrick Gold Corporation
Craig Ford, Inmet Mining Corporation
Pierre Gratton, Mining Association of Canada
Ron Greenway, Teck Resources Limited
Tony Guthrie, De Beers Canada Inc.
Alan Hair, HudBay Minerals Inc.
Douglas Horswill, Teck Resources Limited
Ian Pearce, Xstrata Nickel
Bob Steane, Cameco Corporation
Anne Marie Toutant, Suncor Energy Inc.
Mark Travers, Vale
Zoe Yujnovich, Iron Ore Company of Canada

OFFICERS

Douglas Horswill, Chairman
Ian Pearce, Vice-Chairman
Zoe Yujnovich, Vice-Chairman
Ron Greenway, Treasurer
Pierre Gratton, President and Secretary

TOWARD SUSTAINABLE MINING (TSM) GOVERNANCE TEAM

Chair: Gordon Ball, Syncrude Canada Ltd.

Manon Beauchemin, Iron Ore Company of Canada
Craig Ford, Inmet Mining Corporation
Pierre Gratton, Mining Association of Canada
Tony Guthrie, De Beers Canada Inc.
Alan Hair, HudBay Minerals Inc.
Douglas Horswill, Teck Resources Limited
Serge Miller, ArcelorMittal Mines Canada
Shirley Neault, HudBay Minerals Inc.
Tom Paddon, Baffinland Iron Mines Corporation
Ian Pearce, Xstrata Nickel
Anne Marie Toutant, Suncor Energy Inc.
Mark Travers, Vale
Zoe Yujnovich, Iron Ore Company of Canada

COMMUNITY OF INTEREST PANEL (COI)

Roger Augustine, Assembly of First Nations (New Brunswick/
Prince Edward Island)
Dan Benoit
Richard Briggs, Canadian Auto Workers
Barrie Ford, Makivik Corporation
Ginger Gibson, University of British Columbia
Harry Haber, Community Development Consultant
Brenda Kelley, Bathurst Sustainable Development
Stephen Kibsey, Caisse de dépôt et de placement du Québec
Soha Kneen, Inuit Tapiriit Kanatami
David Mackenzie, United Steelworkers of Canada
Eric Morris, Assembly of First Nations (Council of Yukon First
Nations)
Alan Penn, Cree Regional Authority
Alan Young, Canadian Boreal Initiative

INDUSTRY COI

Craig Ford, Inmet Mining Corporation
Jonathan Fowler, De Beers Canada Inc.
Pierre Gratton, Mining Association of Canada
Douglas Horswill, Teck Resources Limited
Ian Pearce, Xstrata Nickel
Anne Marie Toutant, Suncor Energy Inc.
Tony Walsh, Stornoway Diamond Corporation

TSM INITIATIVE LEADERS

Chair: Shirley Neault, HudBay Minerals Inc.

Annie Blier, IAMGOLD Corporation
Shane Borchardt, Cameco Corporation
Ben Chalmers, Mining Association of Canada
Chantal Clement, Vale
Larry Connell, Agnico-Eagle Mines Limited
Paul Deveau, Xstrata Zinc Canada
Dara Edmonds, Teck Resources Limited
Bill Ferdinand, Barrick Gold Corporation
Kara Flynn, Syncrude Canada Ltd.
Chris Fordham, Suncor Energy Inc.
Jonathan Fowler, De Beers Canada Inc.
Art Frye, Imperial Metals Corporation
Chris Hanks, Newmont Hope Bay Mining Ltd.
Pierre Lavoie, ArcelorMittal Mines Canada
Emma Leith, Agnico-Eagle Mines Limited
Frederic Maloney, Wabush Mines
Darrell Martindale, Shell Canada Energy Inc.
Keith McLean, BHP Billiton Canada Inc.
Jacques Moulins, Xstrata Copper Canada
Ron Nielsen, Cliffs Natural Resources Inc.
David Putnam, De Beers Canada Inc.
Wendy Randall, Newmont Hope Bay Mining Ltd.
Christopher Scholl, Inmet Mining Corporation
Tara Shea, Mining Association of Canada
Claire Vivier, Xstrata Nickel
Dean Williams, Kinross Gold USA Inc.
Dennis Wilson, New Gold Inc.

INTERNATIONAL SOCIAL RESPONSIBILITY

Chair: Craig Ford, Inmet Mining Corporation

Dina Aloï, Goldcorp Inc.
Robert Carreau, IAMGOLD Corporation
Ben Chalmers, Mining Association of Canada
David Clarry, HudBay Minerals Inc.
Dale Coffin, Agnico-Eagle Mines Limited
Silvana Costa, New Gold Inc.
Gillian Davidson, Teck Resources Limited
Aidan Davy, International Council on Mining and Metals
Ross Gallinger, Prospectors and Developers Association of
Canada

Pierre Gratton, Mining Association of Canada
 Chris Hanks, Newmont Hope Bay Mining Ltd.
 Rose Hauswald, Cliffs Natural Resources Inc.
 Alanna Heath, Barrick Gold Corporation
 Paul Hébert, Mining Association of Canada
 Dara Hrytzak-Lieffers, Cameco Corporation
 Andrea Kennedy, Teck Resources Limited
 Rick Killam, New Gold Inc.
 Darrell Martindale, Shell Canada Energy Inc.
 Adam McEniry, Vale
 Cory McPhee, Vale
 John Mullally, Vale
 Ron Nielsen, Cliffs Natural Resources Inc.
 David Parker, Teck Resources Limited
 Mac Penney, Kinross Gold Corporation
 Wendy Randall, Newmont Hope Bay Mining Ltd.
 Tara Shea, Mining Association of Canada
 Aaron Steeghs, IAMGOLD Corporation
 Carleigh Whitman, Teck Resources Limited
 Scott Yarrow, Xstrata Nickel
 Zoe Younger, Mining Association of British Columbia

ENERGY TASK FORCE

Chair: Mark Edwards, Teck Resources Limited

Chris Adachi, Teck Resources Limited
 Michael Aire, Newmont Mining Corporation
 Toy Albo, Teck Resources Limited
 Melissa Barbanell, Barrick Gold Corporation
 Louiza Bell, Teck Resources Limited
 Russell Blades, Barrick Gold Corporation
 Corinne Boone, Hatch & Associates Inc.
 Shane Borchart, Cameco Corporation
 Cheryl Brownlee, Ontario Mining Association
 Victor Bush, Newmont Mining Corporation
 Marc Butler, Xstrata Nickel
 Tim Butler, Iron Ore Company of Canada
 Ben Chalmers, Mining Association of Canada
 Sol Cifuentes, Shell Canada Energy Inc.
 Chantal Clement, Vale
 Ed Cocchiarella, Vale
 Kent Cook, Barrick Gold Corporation
 Andrew Cooper, New Gold Inc.
 Gilles Couture, ArcelorMittal Mines Canada
 Paul Deveau, Xstrata Zinc Canada
 R. Duinker, Hatch & Associates Inc.
 Jim Eddy, Vale

Bill Ferdinand, Barrick Gold Corporation
 Michael Fillion, Teck Resources Limited
 Jonathan Fowler, De Beers Canada Inc.
 Eloi Godin, ArcelorMittal Mines Canada
 Patricia Groulx, Teck Resources Limited
 Jim Huisman, BHP Billiton Canada Inc.
 Alan Luck, Shell Canada Energy Inc.
 Frederic Maloney, Wabush Mines
 Brian Marshall, BHP Billiton Canada Inc.
 John Martschuk, Barrick Gold Corporation
 Peter McBride, Ontario Mining Association
 Jacques Moulins, Xstrata Copper Canada
 A. Murray, Xstrata Nickel
 William Napier, Baffinland Iron Mines Corporation
 Shirley Neault, HudBay Minerals Inc.
 Lewis Oatway, Vale
 Akinlolu Oni, BHP Billiton Canada Inc.
 Mark Passi, Xstrata Nickel
 Christine Petch, Xstrata Nickel
 David Putnam, De Beers Canada Inc.
 Cathy Ramsey, Newmont Mining Corporation
 Darryl Steane, BHP Billiton Canada Inc.
 Adriana Stech, Ontario Mining Association
 Harold Todd, Teck Resources Limited
 Scott Yarrow, Xstrata Nickel

ENVIRONMENT COMMITTEE

Chair: Marc Butler, Xstrata Nickel

Jason Aagenes, Cliffs Natural Resources Inc.
 Jean Alonso, Cameco Corporation
 Raj Anand, Imperial Metals Corporation
 Bruce Anderson, Suncor Energy Inc.
 Joe Armstrong, Vale
 Eric Arseneault, ArcelorMittal Mines Canada
 Jason Ash, Vale Potash Canada Limited
 Sharlene Baird, Wabush Mines
 Sheriden Barnett, Prospectors and Developers Association of Canada
 Grace Barrasso, Xstrata Nickel
 Tim Bekhuys, New Gold Inc.
 Suzie Belanger, Cliffs Natural Resources
 Jean-Claude Belles-Isles, Quebec Mining Association
 Debbie Berthelot, BHP Billiton Base Metals
 John Binns, Hatch & Associates Inc.
 Perry Blanchard, Vale - Newfoundland and Labrador
 Annie Blier, IAMGOLD Corporation

Corinne Boone, Hatch & Associates Inc.
 Philip Bousquet, Prospectors and Developers Association of Canada
 Linda Broughton, BHP Billiton Base Metals
 Brenda Brown, Vale - Newfoundland and Labrador
 Alain Cauchon, ArcelorMittal Mines Canada
 Ben Chalmers, Mining Association of Canada
 Terng Bhing Chen, Deloitte & Touche LLP
 Derek Chubb, BHP Billiton Canada
 Chantal Clement, Vale
 Ed Cocchiarella, Vale
 Richard Cook, Knight Piésold Ltd.
 Gilles Couture, ArcelorMittal Mines Canada
 Greg Crooks, Stantec
 Oliver Curran, Baffinland Iron Mines Corporation
 Sheila Daniel, AMEC Assessment and Resource Development
 Jeremy Dart, Barrick Gold Corporation
 Richard Deane, Teck Resources Limited
 Eric Denholm, BHP Billiton Canada Inc.
 Paul Deveau, Xstrata Zinc Canada
 Tina Ding, Shell Canada Energy Inc.
 Mike Dutton, Vale
 Jacques Duval, ArcelorMittal Mines Canada
 Jim Eddy, Vale
 Mark Edwards, Teck Resources Limited
 Kent England, Cameco Corporation
 Bill Ferdinand, Barrick Gold Corporation
 Michael Filion, Teck Resources Limited
 Chris Fordham, Suncor Energy Inc.
 Art Frye, Imperial Metals Corporation
 Joe Fyfe, Xstrata Nickel
 Elizabeth Gardiner, Mining Association of Canada
 Steve Gaudet, Syncrude Canada Ltd.
 Garry Gawryletz, Teck Resources Limited
 Julie Gelfand, Iron Ore Company of Canada
 Katherine Gizikoff, Taseko Mines Limited
 David Gladwell, AECOM
 Pierre Gratton, Mining Association of Canada
 Julie Gravel, ArcelorMittal Mines Canada
 Alan Hair, HudBay Minerals Inc.
 Ann Marie Hann, Coal Association of Canada
 Gerald Harper, Gamah International Limited
 Steven Hilts, Teck Resources Limited
 Kevin Himbeault, Cameco Corporation
 Tom Hoefer, NWT and Nunavut Chamber of Mines
 Edward Huebert, Mining Association of Manitoba
 Carolyn Hunt, Vale
 Lesley Hymers, Ontario Mining Association

Frank Javor, Vale
 Rick Killam, New Gold Inc.
 Judy Kuzenko, Vale
 Debra Lamash, KlohnCrippen Berger Ltd.
 Simon Latulippe, Genivar Inc.
 Justyna Laurie-Lean, Mining Association of Canada
 Patrick Lauzière, Iron Ore Company of Canada
 Micheal Long, Cliffs Natural Resources Inc.
 Erik Madsen, Baffinland Iron Mines Corporation
 Pierre Maheux, Stantec
 Frederic Maloney, Wabush Mines
 Melinda Mamer, Suncor Energy Inc.
 Darrell Martindale, Shell Canada Energy Inc.
 Rick Meyers, Mining Association of Canada
 Bruce Mikkila, Vale
 Liam R. Mooney, Cameco Corporation
 Christine Moore, Intrinsic Environmental Sciences Inc.
 Jacques Moulins, Xstrata Copper Canada
 Karen Mulchinock, Prospectors and Developers Association of Canada
 John Mullally, Vale
 William Napier, Baffinland Iron Mines Corporation
 Shirley Neault, HudBay Minerals Inc.
 Joel Page, Xstrata Nickel
 Mark Passi, Xstrata Nickel
 Chad Pearson, Xstrata Nickel
 Christine Petch, Xstrata Nickel
 Crystal Pittman, Wabush Mines
 David Plante, New Brunswick Mining Association
 Robert Prairie, Xstrata Zinc Canada
 Lee Preziosi, Iron Ore Company of Canada
 David Putnam, De Beers Canada Inc.
 Ethan Richardson, Shore Gold Inc.
 Stephane Robert, Agnico-Eagle Mines Limited
 John Roberts, Aurora Energy Resources Inc.
 Keith Russell, Partners in Performance International
 Christopher Schöll, Inmet Mining Corporation
 Patricia Schroder, Iron Ore Company of Canada
 Pamela Schwann, Saskatchewan Mining Association
 Walter Sencza, Newmont Canada Corporation
 Helga Sonnenberg, Stantec
 Marty Stearns, Barrick Gold Corporation
 Adrianna Stech, Ontario Mining Association
 Heather Sullivan, Xstrata Nickel
 John Vanderbeek, Suncor Energy Inc.
 Richard Viflanzof, Charles Tennant & Company (Canada) Ltd.
 Angela Waterman, Mining Association of British Columbia
 Chris Webb, SNC-Lavalin Environment Inc.

Stephen West, HudBay Minerals Inc.
 Mark Wiseman, Avalon Rare Metals Inc.
 Linda Wrong, Barrick Gold Corporation
 Scott Yarrow, Xstrata Nickel

METALS WORKING GROUP

Chair: Mike Dutton, Vale

Jean Alonso, Cameco Corporation
 Linda Broughton, BHP Billiton Base Metals
 Marc Butler, Xstrata Nickel
 Mark Edwards, Teck Resources Limited
 David Gladwell, AECOM
 Justyna Laurie-Lean, Mining Association of Canada
 Rick Meyers, Mining Association of Canada
 Christine Moore, Intrinsic Environmental Sciences Inc.
 Robert Prairie, Xstrata Zinc Canada
 Helga Sonnenberg, Stantec
 Bernie Swarbrick, Vale

PUBLIC AFFAIRS COMMITTEE

Chair: Kara Flynn, Syncrude Canada Ltd.

Jon Baird, Canadian Association of Mining Equipment and Services for Exports (CAMESE)
 Manon Beauchemin, Iron Ore Company of Canada
 Doug Brown, Teck Resources Limited
 Heather Bruce-Veitch, Iron Ore Company of Canada
 Ben Chalmers, Mining Association of Canada
 Dale Coffin, Agnico-Eagle Mines Limited
 Dominique Dionne, Xstrata Nickel
 Jessica Draker, Mining Association of Canada
 Peter Fuchs, Xstrata Nickel
 Louis-Philippe Gariépy, Xstrata Copper Canada
 Robert Geregthy, Cameco Corporation
 Byng Giraud, Imperial Metals Corporation
 Paul Hagel, Shell Canada Energy Inc.
 Angela Hamlyn, Canadian Institute of Mining, Metallurgy and Petroleum
 Jeff Hanman, Teck Resources Limited
 Alanna Heath, Barrick Gold Corporation
 Paul Hébert, Mining Association of Canada
 Jeff Hryhoriw, Cameco Corporation
 Robert Huck, Cameco Corporation
 Tracey Irwin, Saskatchewan Mining Association
 André Lavoie, Quebec Mining Association

Benjamin Little, IAMGOLD Corporation
 Stella Long, Vale
 Peter McBride, Ontario Mining Association
 Cory McPhee, Vale
 James Miley, Cameco Corporation
 John Mullally, Vale
 Tom Ormsby, De Beers Canada Inc.
 Danica Pagnutti, Vale
 Mac Penney, Kinross Gold Corporation
 Andrew Ritchie, Shell Canada Energy Inc.
 Christopher Ryder, BHP Billiton Canada Inc.
 Gordon Shields, Suncor Energy Services Inc.
 Brittany Trumper, IAMGOLD Corporation
 Jean Vavrek, Canadian Institute of Mining, Metallurgy and Petroleum
 John Vincic, HudBay Minerals Inc.
 Steve Virtue, Prospectors and Developers Association of Canada
 Lauren Vopni, IAMGOLD Corporation
 Carleigh Whitman, Teck Resources Limited
 Tracey Wolsey, Suncor Energy Inc.
 Scott Yarrow, Xstrata Nickel
 Alexa Young, Teck Resources Limited

TAILINGS WORKING GROUP

Chair: Rick Schwenger, Xstrata Zinc Canada

Raj Anand, Imperial Metals Corporation
 Tracy Anderson, Inmet Mining Corporation
 Lawrence Clelland, KlohnCrippen Berger Ltd.
 Michael Davies, AMEC
 Janet Deisley, Teck Resources Limited
 Randy Donato, Vale
 Tim Eaton, Shell Canada Energy Inc.
 Norman Eenkooren, Suncor Energy Inc.
 Elizabeth Gardiner, Mining Association of Canada
 Philip Gomes, SNC-Lavalin Environment Inc.
 Karlis Jansons, Wardrop Engineering Inc.
 Nural Kuyucak, Golder Associates
 Pat Landine, Cameco Corporation
 Simon Latulippe, Genivar Inc.
 Henri Letient, Teck Resources Limited
 Peter Mencheton, Vale - Newfoundland and Labrador
 Rick Meyers, Mining Association of Canada
 Len Murray, KlohnCrippen Berger Ltd.
 Lee Preziosi, Iron Ore Company of Canada
 David Putnam, De Beers Canada Inc.

Michelle Velez, Syncrude Canada Ltd.
 Stephen West, HudBay Minerals Inc.
 Irwin Wislesky, Golder Associates

SCIENCE COMMITTEE

Chair: Kent England, Cameco Corporation

Raj Anand, Imperial Metals Corporation
 Sheriden Barnett, Prospectors and Developers Association of Canada
 Grace Barrasso, Xstrata Nickel
 Tim Bekhuys, New Gold Inc.
 Suzie Belanger, Cliffs Natural Resources Inc.
 Jean-Claude Belles-Isles, Quebec Mining Association
 Debbie Berthelot, BHP Billiton Base Metals
 Valerie Bertrand, Golder Associates
 Annie Blier, IAMGOLD Corporation
 Martin Boucher, Stornoway Diamond Corporation
 Philip Bousquet, Prospectors and Developers Association of Canada
 Christine Brereton, Vale
 Linda Broughton, BHP Billiton Base Metals
 Brenda Brown, Vale - Newfoundland and Labrador
 Marc Butler, Xstrata Nickel
 Ben Chalmers, Mining Association of Canada
 Derek Chubb, BHP Billiton Canada Inc.
 Ron Connell, Newmont Canada Corporation
 Gilles Couture, ArcelorMittal Mines Canada
 Oliver Curran, Baffinland Iron Mines Corporation
 Sheila Daniel, AMEC Assessment and Resource Development
 Janet Deisley, Teck Resources Limited
 Eric Denholm, BHP Billiton Canada Inc.
 Vince Deschamps, AECOM
 Bill Duncan, Teck Resources Limited
 Mike Dutton, Vale
 Mark Edwards, Teck Resources Limited
 Kent England, Cameco Corporation
 Chris Fordham, Suncor Energy Inc.
 Art Frye, Imperial Metals Corporation
 Joe Fyfe, Xstrata Nickel
 Elizabeth Gardiner, Mining Association of Canada
 Steve Gaudet, Syncrude Canada Ltd.
 Julie Gelfand, Iron Ore Company of Canada
 Katherine Gizikoff, Taseko Mines Limited
 Pierre Gratton, Mining Association of Canada
 Julie Gravel, ArcelorMittal Mines Canada
 Ann Marie Hann, Coal Association of Canada

Keith Holtze, AquaTox Testing & Consulting Inc.
 Dave Huebert, Stantec
 Carolyn Hunt, Vale
 Lesley Hymers, Ontario Mining Association
 Nural Kuyucak, Golder Associates
 Martin Larose, Genivar Inc.
 Justyna Laurie-Lean, Mining Association of Canada
 Patrick Lauzière, Iron Ore Company of Canada
 Erik Madsen, Baffinland Iron Mines Corporation
 Mike McKernan, Stantec
 Rick Meyers, Mining Association of Canada
 Christine Moore, Intrinsic Environmental Sciences Inc.
 Gaston Morin, ArcelorMittal Mines Canada
 Jacques Moulins, Xstrata Copper Canada
 Karen Mulchinock, Prospectors and Developers Association of Canada
 Mike Murchie, Cameco Corporation
 Shirley Neault, HudBay Minerals Inc.
 Lesley Novak, AquaTox Testing & Consulting Inc.
 Engin Ozberk, Cameco Corporation
 Lee Preziosi, Iron Ore Company of Canada
 David Putnam, De Beers Canada Inc.
 Ethan Richardson, Shore Gold Inc.
 Stephane Robert, Agnico-Eagle Mines Limited
 John Roberts, Aurora Energy Resources Inc.
 Erin Robertson, Cameco Corporation
 Mark Ruthven, AMEC Assessment and Resource Development
 Patricia Schroder, Iron Ore Company of Canada
 Walter Sencza, Newmont Canada Corporation
 Helga Sonnenberg, Stantec
 Adrianna Stech, Ontario Mining Association
 Angela Waterman, Mining Association of British Columbia
 Glen Watson, Vale
 Stephen West, HudBay Minerals Inc.
 Linda Wrong, Barrick Gold Corporation
 Scott Yarrow, Xstrata Nickel

TAXATION

Chair: Vacant

Gwen Barth, HudBay Minerals Inc.
 Randy Belosowsky, Cameco Corporation
 Robert Charpentier, BHP Billiton Canada Inc.
 Thomas Cheung, Teck Resources Limited
 Claudine Daley, Inmet Mining Corporation
 Robert De Biasio, Vale
 John Doyle, Xstrata Nickel

Ian Gamble, Thorsteinssons
 Glen Greaney, BHP Billiton Canada Inc.
 Donald Karras, Newmont Mining Corporation
 Maxine Maksymetz, Barrick Gold Corporation
 Brendan Marshall, Mining Association of Canada
 Jocelyn Paradis, Rio Tinto Canada
 Brian Pyra, Deloitte & Touche LLP
 Melvin Roblee, Syncrude Canada Ltd.
 Keith Russell, Partners in Performance International
 Larry Tehse, Cameco Corporation

TRADE POLICY

Chair: Vacant

William Deeks, Pacific Booker Minerals Inc.
 Brendan Marshall, Mining Association of Canada
 David Parker, Teck Resources Limited

TRANSPORTATION

Chair: Vacant

Ron Annesley, Barrick Gold Corporation
 Robert Bell, Teck Coal Ltd. (Elk Valley Coal)
 Peter Bianchini, Iron Ore Company of Canada
 William Dodds, Wabush Mines
 Steven Douville, Vale
 Brendan Marshall, Mining Association of Canada
 Serge Miller, ArcelorMittal Mines Canada
 David Parker, Teck Resources Limited
 David Plante, New Brunswick Mining Association
 Lyle Safronetz, Vale
 Wayne Smith, Vale
 Dan Tolgyesi, Quebec Mining Association
 Jon Zaidan, Cameco Corporation

TSM MINE CLOSURE WORKING GROUP

Chair: Bruce Anderson, Suncor Energy Inc.

Tracy Anderson, Inmet Mining Corporation
 Helen Butler, BHP Billiton Canada Inc.
 Tim Eaton, Shell Canada Energy Inc.
 Bill Ferdinand, Barrick Gold Corporation
 Joe Fyfe, Xstrata Nickel
 Pat Landine, Cameco Corporation
 Lisa Lantaigne, Vale

Ron Lewko, Syncrude Canada Ltd.
 Jacques Moulins, Xstrata Copper Canada
 Shirley Neault, HudBay Minerals Inc.
 Lee Preziosi, Iron Ore Company of Canada
 Rick Schwenger, Xstrata Zinc Canada
 Steve Sibbick, AMEC Assessment and Resource Development

MINING INDUSTRY HUMAN RESOURCES COUNCIL (MIHR) – BOARD OF DIRECTORS

Chair: Patricia Dillon

Vice Chair: Walter Manning, Communications, Energy and Paper Workers Union of Canada (CEP)

Zoe Younger, Mining Association of British Columbia
 David Barnes, Vale
 Ingrid Hann, De Beers Canada Inc.
 Paul Hébert, Mining Association of Canada
 Alain Cauchon, ArcelorMittal Mines Canada
 Chris Hodgson, Ontario Mining Association
 Sylvia Barnard, Cambrian College of Applied Arts and Technology
 Dr. Malcolm Scoble, University of British Columbia
 Dave Stewart, Nickel RIM South Mine
 Roland Lefort, Communications, Energy and Paper Workers Union of Canada, Local 707
 Denis Couvrette, Canadian Auto Workers (CAW), Local 599
 Bill Garton, Canadian Auto Workers (CAW)
 Sean Junor, Cameco

MEMBER COMPANIES

Agnico-Eagle Mines Ltd.
ArcelorMittal Mines Canada
Baffinland Iron Mines Corporation
Barrick Gold Corporation
BHP Billiton Base Metals
BHP Billiton Canada Inc.
Cameco Corporation
Canadian Zinc Corporation
De Beers Canada Inc.
HudBay Minerals Inc.
IAMGOLD Corporation
Imperial Metals Corporation
INMET Mining Corporation
Iron Ore Company of Canada
Kinross Gold Corporation
New Gold Inc.
Newmont Canada Corporation
Newmont Hope Bay Mining Ltd.
North American Tungsten Corporation Ltd.
Nyrstar Canada (Holdings) Ltd.
Royal Canadian Mint
Shell Canada Energy Inc.
Shore Gold Inc.
Suncor Energy Inc.
Syncrude Canada Ltd.
Teck Resources Limited
Taseko Mines Limited
Vale
Wabush Mines
Xstrata Copper Canada
Xstrata Nickel
Xstrata Zinc Canada

ASSOCIATE MEMBERS

AECOM
Alexander Proudfoot Inc.
AMEC
Atlas Copco Construction and Mining
Avalon Rare Metals Inc.
BGC Engineering Inc.

Canadian Mining Industry Research Organization (CAMIRO)
CEDA Environmental Fluid Solutions LP
Canadian Association of Mining Equipment and Services for Export (CAMESE)
Canadian Institute of Mining, Metallurgy and Petroleum (CIM)
Cementation Canada Inc.
Centerra Gold Inc.
Chamber of Marine Commerce
Charles Tennant & Company (Canada) Ltd.
CIBC World Markets
Consortium de Recherche Minérale (COREM)
Deloitte & Touche LLP
EBA Engineering Consultants
ÉEM Inc.
ERM Canada Corporation
Ernst & Young LLP
Fronteer Development Group Inc.
Gabriel Resources Ltd.
Genivar Inc.
Golder Associates
Hatch & Associates Inc.
IDS North America
Intrinsic Environmental Sciences Inc.
Klohn Crippen Berger
Knight Piésold Ltd.
McGill University-COSMO-Stochastic Mine Planning Laboratory
Mining Industry Human Resources Council (MiHR)
Minmetals Resources Ltd.
Norwest Corporation
Orica Canada Inc.
Pacific Booker Minerals Inc.
Partners in Performance International
Quebec Lithium Inc.
Sandvik Mining and Construction Canada Inc.
Schulich School of Business
SGS Mineral Services
SNC-Lavalin Inc.
Stantec
Stornoway Diamond Corporation
Thorsteinssons
Wardrop Engineering Inc.

STAFF OF THE MINING ASSOCIATION OF CANADA

Pierre Gratton

President and CEO

Monique Lafèche

Executive Assistant

Paul Hébert

Vice President, Government Relations

Brendan Marshall

Director, Economic Affairs

Jessica Draker

Director, Communications

Ben Chalmers

Vice President, Sustainable Development

Tara Shea

Manager, Towards Sustainable Mining

Justyna Laurie-Lean

Vice President, Environment and Health

Rick Meyers

Vice President, Technical and Northern Affairs

Marilyn Fortin

Director, Corporate Services and Administration

Justin Laframboise

Financial Officer

Danielle Poitras

Receptionist and Administrative Assistant

**The Mining Association of Canada**

ADVOCACY STEWARDSHIP COLLABORATION

350 Sparks Street, Suite 1105
 Ottawa, ON K1R 7S8
 T – 613-233-9391
 F – 613-233-8897

mining.ca

IN MEMORY OF PAUL STOTHART

In April 2012, MAC lost a friend and valued colleague, Paul Stothart, after a hard fought battle with cancer. Paul served as MAC's Vice President of Economic Affairs after joining in 2006 and made a tremendous impact to the association.