

**Mining Association of Canada  
Towards Sustainable Mining**

**2011 Post-Verification Review Report**

**16<sup>th</sup> Meeting of the  
Community of Interest Advisory Panel**

**September 20, 2011  
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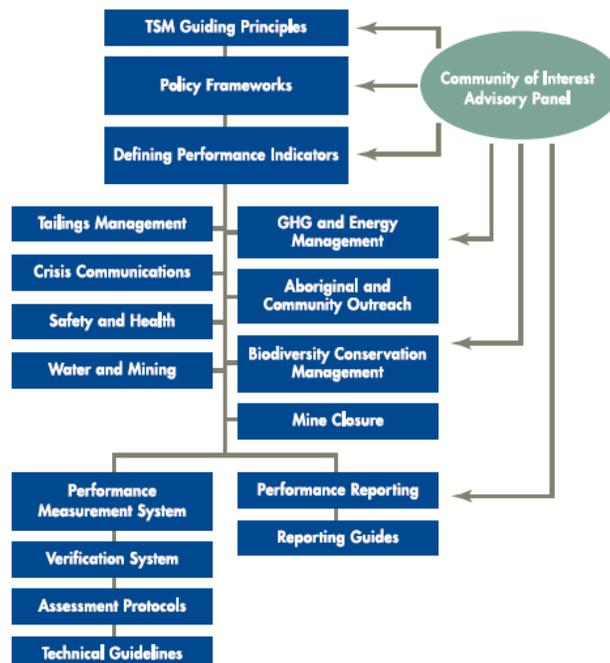
## 1 Introduction

This report presents the results of the MAC Community of Interest Advisory Panel (COI Panel) post-verification review of Iron Ore Company of Canada (IOC) and De Beers Canada Inc. Section 2 of the report provides important background on MAC's TSM initiative, the TSM external verification system, and the COI Panel's role in external verification. Section 3 outlines the post-verification review process and questions agreed to by the COI Panel. Section 4 details the companies' responses to these questions, and the ensuing discussion between the COI Panel and the company. Section 5 discusses key learnings from the post-verification review. A list of all referenced web links is provided in **Annex 1**.

## 2 About the Towards Sustainable Mining (TSM) Initiative

Launched in 2004, the Mining Association of Canada's (MAC) *Towards Sustainable Mining* (TSM) initiative aims to enhance the mining industry's reputation by improving its environmental, social and economic performance. Participation in TSM is a condition of membership in MAC, and requires that members subscribe to a set of guiding principles that are backed by specific performance indicators against which member companies must report. Performance measurement protocols have been developed for tailings management, energy use and greenhouse gas (GHG) emissions management, external outreach and crisis management planning. Additional performance measurement protocols addressing biodiversity and safety and health have also been developed, and the external outreach protocol has been amended to include Aboriginal relations (now referred to as Aboriginal and community outreach). Public reporting on these new protocols will begin in 2012.

**Figure 1: TSM Architecture**



TSM is spearheaded by the TSM Governance Team, a committee led by MAC's Board of Directors. Within each member company, TSM is supported by internal representatives called Initiative Leaders. Committees of MAC members lead the development and refinement of performance indicators and technical guidelines for implementing TSM. Also as part of the TSM initiative, MAC's Board of Directors initiated the Community of Interest Advisory Panel (COI Panel), a multi-stakeholder group whose mandate is to help MAC members and communities of interest improve the industry's performance, to foster dialogue between the industry and its communities of interest, and to help shape TSM goals. The COI Panel meets twice a year, and held its founding meeting in March 2004. The COI Panel terms of reference, a current list of COI Panel members, and meeting agendas and minutes can be found on MAC's website (see **Annex 1**).

## 2.1 Measurement and Reporting

Every year, MAC members self-assess their performance against a series of specific performance indicators in the areas of tailings management, energy use and GHG emissions management, external outreach, and crisis management planning:

**Table 1: TSM Performance Indicators**

TAILINGS MANAGEMENT	ENERGY USE AND GHG EMISSIONS MANAGEMENT	EXTERNAL OUTREACH	CRISIS MANAGEMENT PLANNING
1. Tailings management policy and commitment	1. Energy use management systems	1. Community of Interest identification	1. Crisis management preparedness
2. Tailings management system	2. Energy use reporting systems	2. Effective COI engagement and dialogue	2. Review
3. Assigned accountability and responsibility for tailings management	3. Energy intensity performance target	3. COI response mechanism	3. Training
4. Annual tailings management review	4. Greenhouse gas emissions management systems	4. Reporting	
5. Operation, maintenance and surveillance (OMS) manual	5. Greenhouse gas emissions reporting systems		
	6. Greenhouse gas emissions intensity performance target		

Detailed assessment protocols in each of these areas provide guidance to assist companies in their self-assessments and to facilitate the consistency of self-assessments within and across companies. These protocols are available on MAC's website (see **Annex 1**).

For tailings management, energy use and GHG emissions management, and external outreach, the detailed protocols identify five levels of performance (from Level C, B, A, AA, to AAA<sup>1</sup>) for each indicator, and assessments are conducted for each Canadian operating facility. For crisis

<sup>1</sup> Levels for these indicators were previously identified as Levels 1 to 5. Level C is identical to the previous Level 1 and represents the lowest level of performance. Level AAA is identical to the previous Level 5 and represents the highest level of performance.

management planning, the assessor is required to determine whether the criteria of each indicator are met and to provide a yes/no answer, and to assess each indicator for the company's corporate office, as well as for each of the Canadian operating facilities<sup>2</sup>.

MAC released its seventh TSM Progress Report in October 2011, which is available online (see **Annex 1**). The report provides overall TSM performance results for the four elements outlined above, and also includes detailed company-specific performance results.

## **2.2 TSM External Verification System**

The TSM verification system involves a layered approach. Three elements combine to give MAC members and their communities of interest confidence in the integrity of reported company performance:

- Verification of company self-assessments by an external verifier;
- Letter of assurance from a CEO or authorized officer confirming the verified results (to be published on MAC's website); and
- Annual post-verification review of two or three member companies' performance by the COI Panel.

New MAC members have three years to fully implement the self-assessment and external verification system.

Of the companies that reported 2010 TSM performance results for the 2011 TSM Progress Report, 10 underwent external verification. See **Annex 2** for a list of companies that verified their 2006, 2007, 2008, 2009 and 2010 TSM Results.

More information on the TSM external verification system, including terms of reference for verification service providers, can be found on MAC's website (see **Annex 1**).

## **3 COI Panel Post-Verification Review Process**

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The purpose of the review is to:

- Lend public credibility to the TSM results by improving TSM (including the verification process);
- Highlight deficiencies and best practices;
- Bring cohesiveness in the application of the self-assessment and verification;
- Drive continued performance improvements; and
- Determine whether the member companies are finding the verification process useful.

The Panel guides the review through a number of steps including:

- Using a set of standard guidelines for companies undergoing post-verification review, including a menu of the background information for the Panel;

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<sup>2</sup> While only the application of TSM to Canadian operating facilities is mandatory for MAC members, some members have chosen to apply TSM to operating facilities outside of Canada.

- Providing the guidelines and request for background information to the selected companies;
- Formulating more specific questions for the companies to use in preparing their post-verification review presentations; and
- Requesting the companies to submit their post-verification presentation and supporting information in time to be included in the Panel meeting materials.

The Panel selected Iron Ore Company of Canada (IOC) for the September 2010 post-verification review from the list of companies planning to undergo TSM verification in 2010; however, IOC requested that its post-verification review be delayed until September 2011 to allow it to reach its goal of maintaining and achieving TSM scores of AA's and AAA's in all performance areas by the end of 2010. At the September 2010 meeting, De Beers Canada Inc. volunteered to undergo post-verification review in 2011.

This report summarizes the information provided by the companies in their post-verification reviews and provides the Panel discussion on the presented information.

## **4 Results of the Post-Verification Review**

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### **4.1 Iron Ore Company of Canada (IOC)**

Zoë Yujnovich, President and CEO, and Damian D'Aguiar, General Manager, Environment, presented IOC's post-verification review. Manon Beauchemin, VP, External Relations and Corporate Affairs, was present for the review and answered applicable questions as they arose. A summary of the presentation and the ensuing discussion is provided below.

#### **4.1.1 Context**

Rio Tinto operates globally with five principal product groups: aluminum, copper, diamonds and minerals, energy and iron ore. Rio Tinto predominantly mines in OECD countries, but is increasingly transitioning its footprint into emerging economies. Establishing a good reputation for how it works with key stakeholders has provided a strong foundation for growing its operations in developing countries.

Rio Tinto has a number of central standards around CSR issues (e.g., water, greenhouse gas emissions management, human rights and health and safety) that guide management across its operations. Breakthroughs and progress at operations are recognized and embedded in central standards. Rio Tinto is particularly proud of its approach to biodiversity and community engagement; it is currently working on key environmental issues in developing countries, including biodiversity issues that contribute to local economies.

IOC is a leading iron ore producer, with 8.9 billion tonnes of mineral inventory. Mining began in Labrador City in 1962 and more than 50 years of future operation is anticipated. IOC is a joint venture company between Rio Tinto, Mitsubishi Corporation and Labrador Iron Ore Royalty Corporation (LIORC). The company has an integrated production system which includes a mine (in Labrador City), plants, a railway and a port (in Sept-Îles).

#### **4.1.2 Corporate Approach to Sustainability**

Rio Tinto's vision includes the following elements:

- Achieving zero harm and promoting a zero harm culture;
- Having an engaged, competent and flexible workforce;
- Being the employer of choice;
- Delivering > 50MT of quality iron ore products at low cost;
- Having a reliable and efficient operation (particularly in light of its significant expansion program, which proposes to double the size of its footprint); and
- Being recognized as a major contributor in the community (e.g., some contributions to date have supported CAT scan equipment for Labrador City, Habitat for Humanity and Ronald McDonald House).

Having a strong community leads to having a strong business, so Rio Tinto's broad vision is in building communities across the life cycle of its product (i.e., where it operates and where its product is used). Rio Tinto's elements of a sustainable, competitive business include:



Zero harm is a key business priority that underlies Rio Tinto's approach to its **people** (i.e., safety), **performance** (i.e., production) and **competitiveness** (i.e., an economic engine). Over time, Rio Tinto has achieved enormous improvements in lost time and injury frequency rates, through an emphasis on leadership and by putting strong systems in place. Subsequent emphasis will be placed on engineering, design-based solutions that account for human behaviour (e.g., human error). On its journey to zero environmental harm, recent emphasis has been in response to new legislation (e.g., air quality improvements, mine effluent management and legacy sites risk management). Emerging goals will consider positioning IOC as a low carbon supplier (i.e., with low carbon pellets), conducting assessments for expansion permitting, addressing biodiversity and conducting green mining.

#### Panel Questions / Commentary

- COI Panel members commented on the challenge of addressing competing environmental priorities (e.g., reducing GHG emissions and improving energy intensity versus reducing

particulate matter, which requires more energy to capture particulate matter), particularly given that governments have used different philosophies to establish regulatory mechanisms (e.g., out of pipe versus point of impingement); issues may span a range of departments and various environmental files are often handled by different people within a company.

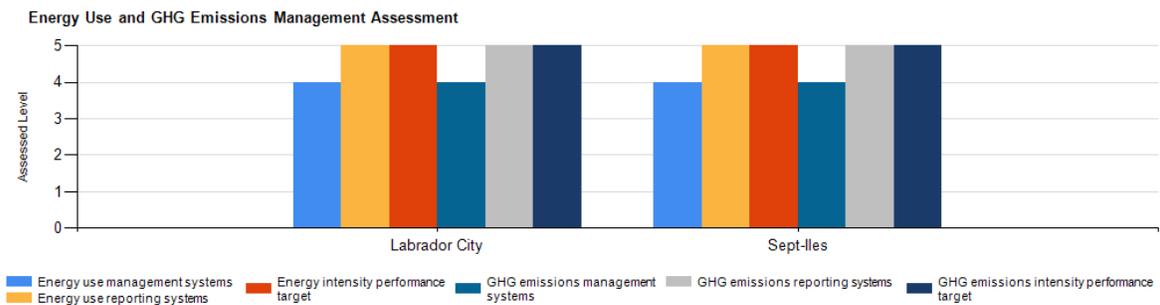
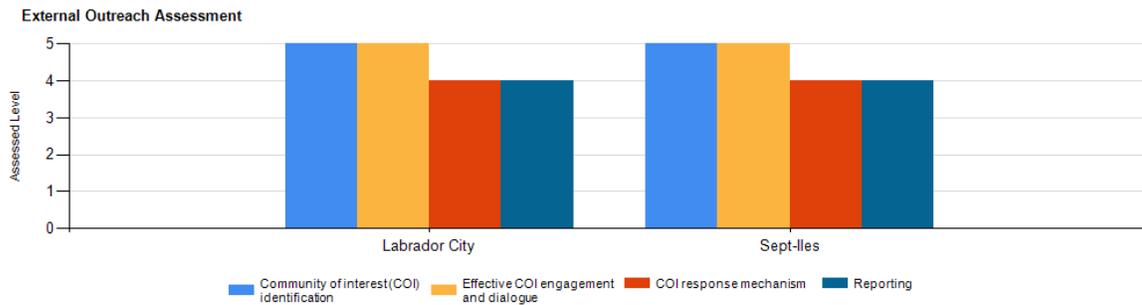
- IOC noted that it spends a lot of time understanding the holistic net benefit (or impact) of its business.
- Another industry representative noted that in Alberta, where lots of environmental monitoring initiatives are currently underway, industry has partnered with the provincial government to assign “keepers” (within companies and within the province) to keep a master list of all the requests for studies and monitoring.

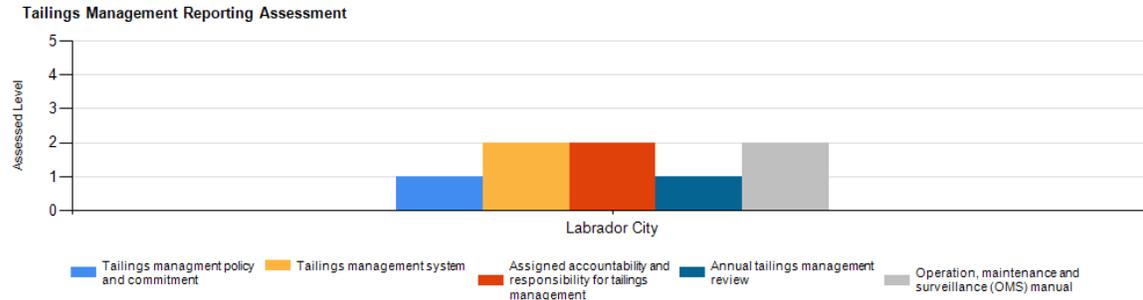
**4.1.3 TSM Results and Lessons Learned**

IOC’s verified 2010 TSM results (as presented in the 2011 TSM Progress Report) and associated commentary are provided below.

**Crisis Management Planning Assessment**

	<b>Crisis management preparedness</b>	<b>Review</b>	<b>Training</b>
Corporate	Y	Y	Y
Labrador City	Y	N	N
Sept-Iles	Y	Y	Y





## Tailings Management

The MAC tailings management protocol sets the bar globally for tailings management performance and strong operational performance is required to improve scores on tailings management indicators. Between 2009 and 2010, IOC was able to improve its scores on two indicators by developing a new tailings policy, updating its OMS manual, engaging quarterly with its communities of interest, establishing a tailings management team, and undertaking an annual tailings management review with its VP, Operations. IOC is experiencing slower progress on these indicators due to the loss of key personnel and institutional knowledge on tailings operations; however, it is addressing employee turnover challenges by creating clearer roles and responsibilities in its Health, Safety, Environment and Quality management system.

IOC deposits its tailings into a fish bearing lake; however, iron ore tailings are inert, so this activity does not result in fish mortality. IOC has established a 25 year agreement and bond to compensate for equivalent fish habitat filled in by tailings sediment. This program began in 2003 and received a North American Waterfowl Management Plan Great Blue Heron Award in 2005. IOC has also worked with Department of Fisheries and Oceans scientists to develop and test a flocculent (to settle suspended solids), even though there is no legal requirement to do this.

## Panel Questions / Commentary

- *This example of compensating fish habitat provides very useful case material. IOC should write up its experience (including from the DFO perspective) and share its compensation plan publically and with other companies.*
- *Will IOC's expansion program result in tailings to new lakes?*
  - IOC is proposing dry disposal of tailings for its expansion.
- *What drives the decision of how to dispose of tailings (dry versus in lakes)?*
  - Corporate social responsibility is the driver for IOC's proposal of dry disposal, despite the fact that it may cost more than disposal in lakes.

## Energy Use and GHG Emissions Management

Although iron ore mining is not energy intensive, the pelletizing process is very energy intensive. IOC obtains much of its energy from hydropower, but fuel is still required in processing to maintain high temperatures over a long period of time. Rio Tinto has strict standards for energy and greenhouse gas management (that are similar to the MAC protocol) that drive performance at IOC. IOC does well on this protocol and has a strong business case for reducing emissions. IOC is committed to continuously reduce both energy consumption and GHG emissions to the receiving environment through improving efficiency of operations and using new technology. Current goals include developing key performance indicators by product type and advancing low carbon pellet

opportunities (pelletizing is part of the lowest emitting GHG route from iron ore to steel). The leading option to reduce GHG emissions in steelmaking is through pelletizing (i.e., low carbon pellets); however, a broader life-cycle approach of the product (that extends beyond Canada's borders) must be considered to appreciate a net benefit in emissions reductions.

### **Panel Questions / Commentary**

- *Can IOC separate out hydroelectric versus fuel intensity to see what the complete picture looks like for emissions in pelletizing?*
  - Yes, IOC can break out the data. Hydropower provides a strategic advantage for Canada, but it is currently being priced in a way that is not economically feasible.
- *How much of IOC's fleet use fuel versus electricity?*
  - All of IOC's mobile fleet uses fuel, but these vehicles are hybrids. In order to improve efficiency, IOC has looked at the design of roads and examined the load on trucks. All other operations (i.e., buildings and equipment) are electric.
  - An ongoing challenge is that governments want to focus on absolute reductions, but industry likes to talk about intensity (because operations change over time).

### **Crisis Management Planning**

IOC achieved a "yes" score for all indicators, at all facilities in 2010.

### **External Outreach**

IOC achieved Levels AA and AAA on all indicators, except for one. IOC has a COI Panel in Labrador City and in Sept-Îles. It received a Level A score for its "COI response mechanism" at Sept-Îles because it didn't respond to communities within the specified 48 hour response time.

### **Panel Questions / Commentary**

- *How do IOC's COI Panels operate?*
  - These panels are made up of 25-30 people that represent a variety of interests (i.e., education, business, health care, justice, environment, labour, Aboriginal, elected officials). The COI Panels meet four times per year to discuss issues and projects. It is a requirement of Rio Tinto to have this type of Panel and the approach is reviewed after three years. For the Panel in Sept-Îles, the community has taken ownership over its operation; whereas IOC has retained ownership over the processes for the Panel in Labrador City.
- *How do community members register complaints?*
  - IOC has a direct line for complaints (or people will call the Town and the Town will call IOC). Community members do not have to wait for the next COI Panel meeting to raise concerns.
- *What is IOC's experience with engaging Innu?*
  - IOC primarily engages with the Innu of Sept-Îles. The relationship was more ad hoc at first, but IOC is trying to formalize this relationship and is currently working on development of a MOU with the Innu of Sept-Îles and the Innu of Schefferville. IOC is seeking to develop capacity in these communities (in advance of an IBA) to promote partnerships, Aboriginal business and skills development that could support the company. In 2005, IOC sold its passenger rail service (between Schefferville and Sept-Îles) to Tshiuetin Rail Transportation Inc.
- *Recruitment and renewal of employees was identified as an issue in the sector roundtables for the Plan Nord. Is this part of IOC strategy?*

- IOC sees Aboriginal people as part of this renewal and is making an effort to support capacity development.
- *Companies that invest in Aboriginal groups (rather than waiting for government funding) typically fair better.*
  - IOC is not waiting for government funding. IOC is investing in Aboriginal communities because of corporate social responsibility, to contribute to the community and to bridge a gap in its workforce. A significant portion of Rio Tinto Diavik's workforce is from local Aboriginal communities, but IOC has been less effective at Aboriginal recruitment. IOC is using innovative techniques to onboard Aboriginal employees, but hasn't tracked the portion of Aboriginal employees in its workforce.
- *IOC should start to track the percentage of its workforce that is Aboriginal; this is an important part of social license to operate.*
  - This statistic can be difficult to measure, because it is based on voluntary information where people self-identify as Aboriginal.
    - Measurement is important for all groups (i.e., Aboriginal, visible minorities), not to have an objective target to hold to, but to measure success of partnerships. Multiple solutions are needed to address workforce gaps and many other unique opportunities exist to target groups of people (e.g., training in local community colleges; women building futures around Edmonton, single parents, etc.).
    - There is a new group in AANDC sustainable communities. Additional measures (beyond Aboriginal employment) are needed.
- *Labrador City is about 50 years old. Are young families (Innu and non-Aboriginal) moving to Labrador City?*
  - The entire Labrador trough is under intense recruitment pressure. The population in Labrador City is a binomial distribution clustered around ages 25-30 and 50-60 and the younger demographic has different expectations for their communities. However, IOC is trying to create conditions that meet a range of interests in order to attract families and also transitory employees (i.e., a range of housing choices, flexible work options, child care support services and green space). Labrador City does have an adjacent Innu community. The nearest community is located on the coast of Labrador. Innu employees live on the coast with their families and commute to work.
- *In creating an IBA, will the agreement address legacy issues that occurred before the agreement? Has IOC had discussions with communities about free, prior and informed consent?*
  - An IBA will be focused on the future, but will recognize the past. IOC would like to collaborate, build trust and build mutually respectful relationships, acknowledging past experiences.

#### **4.1.4 Challenges, Successes and Looking Ahead**

IOC identified three opportunities for improvement on TSM progress:

1. **Tailings Management at Labrador City** – integrating tailings management into line operations;
2. **External Outreach at Sept-Îles** – reassessing communities of interest and re-engaging through open and frequent dialogue; and
3. **Incorporation of new TSM protocols** – Safety and Health; Biodiversity Conservation Management; Aboriginal Relations & Community Outreach.

## **4.2 De Beers Canada Inc.**

Jonathan Fowler, VP, Aboriginal Affairs and Sustainability, and David Putnam, Director, Safety Health and Environment, presented IOC's post-verification review. A summary of the presentation and the ensuing discussion is provided below.

### **4.2.1 Context**

The De Beers Family of Companies operates globally, with the majority of its mining operations in South Africa, Botswana and Canada. De Beers operates across the diamond life-cycle, from access and exploration to jewellery retail. De Beers began exploration in Canada in 1961. De Beers Canada's corporate head office is located in Toronto, Ontario. The company has two operating mines in Canada (Snap Lake and Victor Mine) and one project in the feasibility stage (Gahcho Kué). Expansion is proposed at both the Snap Lake and Victor mines.

1. **Victor Mine, ON:** Victor Mine is Ontario's first diamond mine. Commercial production began in 2008 and the operation has 12 year life of mine (plus five years anticipated for mine closure). The operation is an open pit mine, located in a muskeg environment in the James Bay lowlands. The mine is remote with fly-in and winter road access. De Beers Canada has three signed Impact Benefit Agreements and one signed Working Agreement with local communities. Power supply is obtained from the grid and the facility has on-land processed kimberlite ("tailings") containment.
2. **Snap Lake Mine, NWT:** Snap Lake Mine is Canada's first fully underground diamond mine. Commercial production commenced in 2008 and the operation has a 20 year life of mine (plus five years anticipated for mine closure). The operation is a small headwater mine in a pristine ecosystem, with several complex monitoring systems. The mine is remote with fly-in and winter road access. De Beers Canada has four signed Impact Benefit Agreements with local communities. Power is generated on site using diesel fuel and the facility has on-land processed kimberlite ("tailings") containment.
3. **Gahcho Kué Project, NWT:** The Gahcho Kué Project is an advanced exploration project currently in the Environmental Impact Review stage. This project will be an open pit mine, with an expected 11 year life of mine. The project is a joint venture with Mountain Province Diamonds.

### **4.2.2 Corporate Approach to Sustainability**

De Beers Canada has five values for which its sustainability approach is built around:

**Be Passionate**

- High performance teams
- Visible leadership
- Regular communications with staff

**Build Trust**

- 100% Accountability
- Transparent management
- The DBCI rewards & recognition program

**Show We Care**

- Consultative committees at each of the mine sites
- Open door policy of the CEO
- Employee sensitivity is reflected when dealing with difficult decisions

**Pull Together**

- One team working together
- Resilience to the hard economic times
- Workforce representation and diversity

**Shape The Future**

- Strategic plan
- Production objectives
- Talent management program

De Beers Canada places a strong emphasis on health and safety performance. The company has established a CEO award for Safety Health and Environmental Excellence that recognizes employee contributions to build workplace culture. It has implemented safety and health management systems based on OHSAS 18001. To date, De Beers Canada has not had a loss of life incident. The company is strengthening health and safety systems and behaviour by engineering out human behaviour, undertaking “no-fault” reporting and “learning from incidents”. To improve health and safety performance at Snap Lake, the corporate head office worked with mine management on accountability, which included visiting a peer company to learn about its health and safety strategy. De Beers Canada also developed an International Responsibility System to engage with employees on health and safety rights and responsibilities.

De Beers Canada also places an emphasis on community development and has a community policy. Stakeholder engagement at the operations level focuses on four key areas: benefits, environmental and socio-economic impacts, implementation of IBAs and issues and grievance resolution. In 2010, 63% of expenditures on business contracts were for Aboriginal businesses at Snap Lake Mine and 29% at Victor Mine. The percentage is less at Victor Mine because the local communities do not have experience with mining and have less capacity. In addition, Aboriginal employment varies throughout the year.

### **Responses to COI Panel Post-Verification Review Working Group Questions**

- *Why has De Beers chosen to report on its number of employees in person years?*
  - This is the approach requested by government regulators.
- *Could De Beers provide more details on the kinds of business opportunities that are created through IBAs?*
  - IBAs are closed documents, but examples of opportunities include training programs and scholarship programs.
- *Could DeBeers provide more details on its corporate social investment program?*
  - The investment program includes supporting scholarships, health and wellness initiatives, spiritual events, youth programs, community planning initiatives, the National Aboriginal Achievement Foundation and the Books at Home program.
- *Could DeBeers elaborate on the nature of its business expenditures that contribute to northern businesses?*

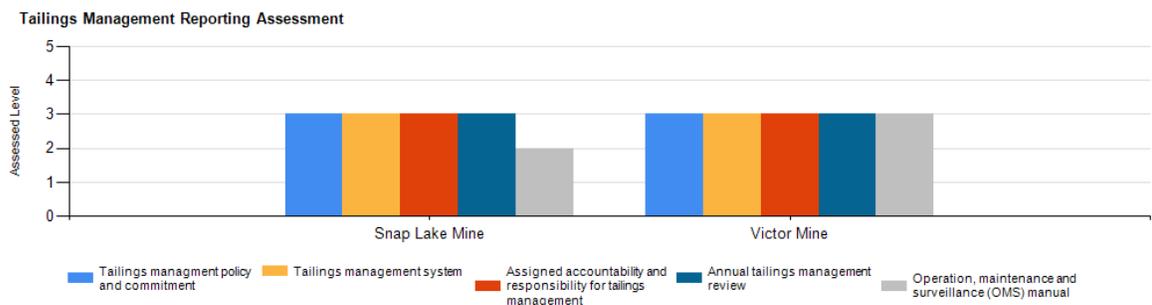
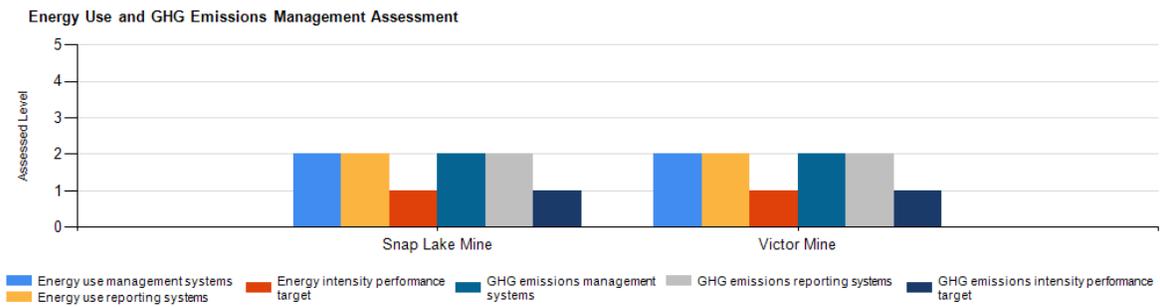
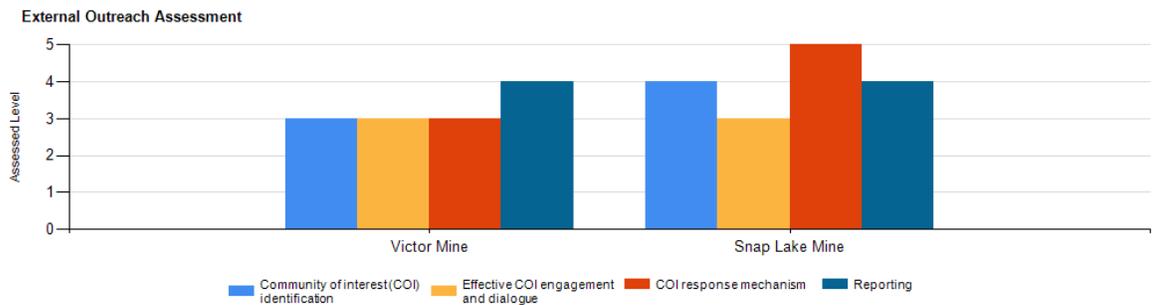
- Expenditures are for construction and operational contracts. Examples include: site services, freight, winter road construction and maintenance, building erection, purchasing, food supply, materials supply, equipment repair, drilling, etc.

**4.2.3 TSM Results and Lessons Learned**

De Beers Canada’s verified 2010 TSM results (as presented in the 2011 TSM Progress Report) and associated commentary are provided below.

**Crisis Management Planning Assessment**

	<b>Crisis management preparedness</b>	<b>Review</b>	<b>Training</b>
De Beers Canada Inc.	Y	Y	Y
Snap Lake Mine	N	N	Y
Victor Mine	Y	Y	Y



### **Crisis Management Planning**

De Beers met requirements for achieving “yes” scores for all indicators, with two exceptions (both were at Snap Lake). For the “preparedness” indicator, Snap Lake did not receive a “yes” because its enterprise risk management was not linked to its Crisis Management Plan, staff changes were not reflected in the plan (which is an ongoing challenge with staff turnover) and the mine didn’t engage with local emergency response authorities. For the “review” indicator, the notification system was not tested twice annually.

### **Energy Use and GHG Emissions Management**

Both facilities received scores of either Level C or B across all indicators. However, De Beers Canada is now measuring energy intensity targets, which will improve scores on these indicators in 2011. In order to make improvements on these indicators, De Beers sought independent advice to establish intensity targets, assigned energy leaders at its mines, will be able to provide awareness training through MAC’s new e-learning modules and will track energy use through its SAP system. De Beers conducted a wind study at Snap Lake, and with 2.5 years of data determined that a wind generation project would not be feasible. De Beers is conducting secondary heat recovery of generators (in order to use low grade heat to heat ventilation air in the mine).

### **Panel Questions / Commentary**

- *Even though energy and greenhouse gas management is less of a driver for De Beers (i.e., it emits less relative to other companies), is it still a focus?*
  - De Beers is aiming to achieve a Level A on all indicators.

### **Tailings Management**

Both facilities achieved Level A on all indicators, with one exception. Snap Lake received a Level B on the “Operations management system manual” indicator. To improve this score Snap Lake will update its OMS manual to add explicit emergency response requirements related to tailings management.

### **External Outreach**

De Beers Canada met its goal of Level A or higher on all indicators. Scores are higher on some indicators in the NWT where requirements are greater. De Beers will continue to improve its scores on External Outreach indicators.

### **Verification Process**

Robert Wood, British Standards Institute Canada, verified De Beers’ TSM self-assessment results. Six self-assessment scores changed as a result of the verification process (including scores that went up and down). However, De Beers Canada and its verification service provider had several detailed discussions about the accuracy of other scores.

#### **4.2.4 Challenges, Successes and Looking Ahead**

De Beers Canada noted a number of key success factors that contribute to improved TSM performance. These include:

- Working with general managers to help them understand the value of TSM and how it will improve their operation;

- Conducting early verifier engagement (e.g., completion of gap analysis to provide a baseline for improvement);
- Undertaking TSM training and one-on-one coaching with TSM champions (MAC online training will help with this);
- Undertaking an annual strategy and planning session; and
- Reporting quarterly to the Executive Committee.

De Beers also noted a number of challenges:

- Undertaking its first self-assessment during the 2009 recession;
- Undertaking verification of second self-assessment;
- Retraining to address staff turnover; and
- Integrating TSM into a non-Canadian company's existing sustainability framework.

Opportunities exist to enable greater collaboration between TSM champions at the two mines and to integrate TSM into certified management systems. Priorities in 2011 include improving crisis management scores at Snap Lake, updating the Snap Lake OMS manual (tailings management) and improving energy and GHG management at both mines.

### **Panel Questions / Commentary**

- *Is there a COI Panel at Victor Mine?*
  - Not yet, but hopefully in 2012.
- *Is there a COI Panel at Snap Lake Mine?*
  - No and De Beers is not certain about whether a COI Panel would be effective. Communities of interest include four Aboriginal groups and the City of Yellowknife, and not everyone wants to be in a room together.
- *The percentage of expenditures on Aboriginal business (63%) at Snap Lake is very good. How has De Beers achieved this?*
  - De Beers has a procurement strategy and there is a history of mining near Yellowknife, which has led to capacity development.
- *Does De Beers undertake any business mentoring?*
  - Yes. De Beers makes businesses aware of contracts, offers workshops on business management skills and asks entrepreneurs what kind of mentoring they need.
- *Does government participate in mentoring programs?*
  - Sometimes. It depends on who's there and what they are offering.
- *How does De Beers define "Aboriginal business"?*
  - Each Impact Benefit Agreement (IBA) contains a definition of "Aboriginal business" that may include specific requirements; however, these definitions generally follow the same themes. "Aboriginal business" means a sole proprietorship, partnership, not for profit corporation, cooperative, or a limited partnership operating independently or in a joint venture, alliance, consortium or a combination thereof:
    - which has greater than fifty percent (50%) beneficial ownership or effective control held by one or more of the First Nation, First Nation Members, or a combination thereof;
    - which has been declared an Aboriginal Business by the Registrar\* pursuant to the provisions of this Chapter due to the fact that it possesses six (6) or more full-time employees where at least thirty-three percent (33%) of such employees are First Nation Members;
    - which has significant First Nation ownership; or

- which has been declared an Aboriginal Business by the Registrar\* due to the fact that it possesses six (6) or more full- time employees with less than thirty-three percent (33%) First Nation Members who are employees, but has significant First Nation benefit, ownership control or employment.

Notes:

- \* refers to a business registrar appointed for the particular IBA.
- First Nation in this context refers to the particular First Nation that is the party to the specific IBA.
- There may also be a specific registration or domicile requirement (e.g., must be registered in or have its head office in the Northwest Territories.)
- *How many Aboriginal employees work at Victor Mine?*
  - Out of 420 employees, about 143 are Aboriginal. Turnover was higher in 2010 than previously (because of family issues and employees are tired of working away from home).
- *Does De Beers pay for training on heavy equipment?*
  - Yes.
- *Does De Beers have any plans to apply TSM at its operations outside of Canada?*
  - De Beers Canada shared MAC's Crisis Management Planning protocol and one of its mine's Crisis Management Plans with colleagues in Botswana.
- *How will De Beers tackle the issue of employee turnover?*
  - De Beers is currently tracking turnover and has several plans to reduce it. Efforts have included using more culturally appropriate questions during exit interviews to better understand root causes of turnover.
  - Another industry representative commented that their company uses a family on-boarding program at remote sites where families visit the mine site to understand the day-to-day processes that their family member will be engaged in.
- *Does De Beers have personalized advancement plans for Aboriginal people in the North?*
  - De Beers has an annual performance appraisal system that addresses personal development, including advancement. De Beers has tracked career movement at both mines.
- *How will the capital costs at Gahcho Kué compare to Snap Lake?*
  - Because it will be an open pit mine, costs will be less than Snap Lake.
- *How much profit is dedicated to De Beers' corporate social investment program?*
  - 1.5% if you exclude benefits paid from IBA payments.
- *Does De Beers Canada have any security issues?*
  - De Beers explains carefully why it does criminal record checks. If a prospective employee has a record, De Beers looks at the nature of infraction to determine whether it matters. Drug offences would depend on the nature of and how recent the infraction occurred. De Beers undertakes random alcohol and drug testing of employees and has never experienced push back from employees.
  - One Panel member noted that it can be very difficult for community members to get pardons and they often do not understand that companies might hire them despite their record.
- *Does De Beers have security personnel?*
  - Yes. These are mostly internal De Beers staff who have undergone training on human rights.
- *Have MAC Initiative Leader meetings served as a forum for sharing best practices?*
  - Not really.
- *What is the optimal disposal approach of processed kimberlite?*

- The optimal approach includes perimeter drainage sumps, water management / settling ponds, suspended solid treatment, followed by discharge to the environment.
- *Does stacking lend itself to progressive reclamation?*
  - De Beers reclaims as it goes and takes lessons to next phase.

## **5 Summary of 2011 Post-Verification Review**

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The Panel facilitator noted a number of themes that emerged during the post-verification reviews that overlapped with themes discussed during other meeting agenda items. These themes include:

- Community development;
- Community engagement;
- Regulatory burden and provincial/territorial/regional approaches that shape performance;
- Trade offs in addressing environmental performance (particularly with respect to regulations);
- Decision-making and legacy going forward; and
- New and innovative ways of working together.

In a wrap-up discussion, Panel members shared final reflections on learnings from the 2011 post-verification review. These perspectives are summarized below.

- Several opportunities exist for developing case study materials and for encouraging best practice sharing. In some cases, greater learning may come from tough experiences. Significant, regional, cross-cutting issues exist that could be addressed by MAC.
- As companies move into proactive management of issues with communities, there is still more that they could do (i.e., capacity building) and this message needs to be communicated to the public. Companies could position themselves as “opportunities” for communities.
- Mining companies need to get out there and tell their stories. MAC knows this, but is a long way off. It has been a challenge to figure out how to get out and communicate (i.e., how? what to say? role of the industry? role of the company?).
- The industry needs to focus on community development, particularly in old mining communities.

## **Annex 1: Web Links**

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COI Panel Information:

<http://www.mining.ca/site/index.php/en/towards-sustainable-mining/community-of-interest-advisory-panel.html>

Detailed Assessment Protocols:

<http://www.mining.ca/site/index.php/en/towards-sustainable-mining/performance-measures-a-protocols.html>

2011 TSM Progress Report:

<http://www.mining.ca/site/tsmpressreport2011/index.html>

TSM External Verification System Information:

<http://www.mining.ca/site/index.php/en/towards-sustainable-mining/verification-service-providers.html>

## **Annex 2: List of Companies That Verified Their TSM Results**

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### **2007 Review (2006 Results)**

Albian Sands Energy Inc.  
 BHP Billiton Diamonds Inc.  
 Breakwater Resources Ltd.  
 CVRD Inco Ltd. (excluding Voisey's Bay Nickel)  
 Diavik Diamond Mines Inc.  
HudBay Minerals Inc.  
 Inmet Mining Corporation  
 Iron Ore Company of Canada  
 Suncor Energy Inc.  
 Syncrude Canada Ltd.  
 Teck Cominco Limited

### **2008 Review (2007 Results)**

ArcelorMittal Mines Canada  
Barrick Gold Corporation (a sample of facilities)  
 Syncrude Canada Ltd.  
 Teck Cominco Limited (a sample of facilities)  
 Xstrata Copper Canada  
Xstrata Nickel  
Xstrata Zinc Canada

### **2009 Review (2008 Results)**

BHP Billiton Diamonds Inc. – EKATI Diamond Mine  
IAMGOLD  
 Inmet Mining Corporation

### **2010 Review (2009 Results)**

Shell Canada Energy – Shell Albian Sands  
 Vale  
Breakwater Resources Ltd.  
 HudBay Minerals Inc.  
 Iron Ore Company of Canada  
 Suncor Energy Inc.  
Teck Resources Limited – Highland Valley Copper

### **2011 Review (2010 Results)**

ArcelorMittal Mines Canada  
 Barrick Gold Corporation  
De Beers Canada Inc.  
 Diavik Diamond Mines Inc.  
Iron Ore Company of Canada  
 Suncor Energy Inc.  
 Syncrude Canada Ltd.  
 Xstrata Copper Canada  
 Xstrata Nickel  
 Xstrata Zinc Canada

*Underlining denotes which companies completed post-verification reviews in each year.*