

**MAC**  
The Mining Association of Canada

# Towards Sustainable Mining: A Necessary Action

CEAA Conference

October 6, 2005



## THE UGLY CANADIAN



### THE PHILIPPINES: MARCOPPER



### GUYANA: OMAI



### KUMPTOR, KYRKYZSTAN

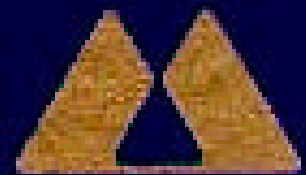


### LOS FRAILES, SPAIN

# The Bottom Line for TSM

## Why Towards Sustainable Mining?

- The status quo simply isn't sustainable
- Our social license is at risk
- The bar keeps rising
  - We must improve our performance, both operational and social
  - We must improve stakeholder judgment of our industry by taking action collectively



# TSM Licence to Operate



# TSM – Building the Architecture





# TSM Guiding Principles

As members of the Mining Association of Canada, our role is to responsibly meet society's needs for minerals, metals and energy products. To achieve this we engage in the exploration, discovery, development, production, distribution and recycling of these products. We believe that our opportunities to contribute to and thrive in the economies in which we operate must be earned through a demonstrated commitment to sustainable development.\*

Accordingly, our actions must demonstrate a responsible approach to social, economic and environmental performance that is aligned with the evolving priorities of our communities of interest.\*\* Our actions must reflect a broad spectrum of values that we share with our employees and communities of interest, including honesty, transparency and integrity. And they must underscore our ongoing efforts to protect our employees, communities, customers and the natural environment.

We will demonstrate leadership worldwide by:

- Involving communities of interest in the design and implementation of our Towards Sustainable Mining initiative;
- Proactively seeking, engaging and supporting dialogue regarding our operations;
- Fostering leadership throughout our companies to achieve sustainable resource stewardship wherever we operate;
- Conducting all facets of our business with excellence, transparency and accountability;
- Protecting the health and safety of our employees, contractors and communities;
- Contributing to global initiatives to promote the production, use and recycling of metals and minerals in a safe and environmentally responsible manner;
- Seeking to minimize the impact of our operations on the environment and biodiversity, through all stages of development, from exploration to closure;
- Working with our communities of interest to address legacy issues, such as orphaned and abandoned mines;
- Practicing continuous improvement through the application of new technology, innovation and best practices in all facets of our operations.

...cont'd

# TSM Guiding Principles

In all aspects of our business and operations, we will:

- Respect human rights and treat those with whom we deal fairly and with dignity.
- Respect the cultures, customs and values of people with whom our operations interact.
- Recognize and respect the unique role, contribution and concerns of First Nation, Inuit and Metis and indigenous peoples worldwide
- Obtain and maintain business through ethical conduct.
- Comply with all laws and regulations in each country where we operate and apply the standards reflecting our adherence to these Guiding Principles and our adherence to best international practices.
- Support the capability of communities to participate in opportunities provided by new mining projects and existing operations.
- Be responsive to community priorities, needs and interests through all stages of mining exploration, development, operations and closure.
- Provide lasting benefits to local communities through self-sustaining programs to enhance the economic, environmental, social, educational and health care standards they enjoy.

\* MAC draws on the 1987 Brundtland Commission definition of Sustainable Development:  
“Development that meets the needs of the present without compromising the ability of future generations to meet their own needs.”

\*\* We use the term Communities of Interest to include all of the individuals and groups who have or believe they have an interest in the management of decisions about our operations that may affect them. This includes: employees, contractors, Aboriginal or indigenous peoples, mining community members, suppliers, customers, environmental organizations, governments, the financial community, and shareholders.

# TSM Indicators

- In addressing the TSM Guiding Principles, MAC developed performance indicators to:
  - respond to critical performance areas
  - demonstrate performance;
  - facilitate continuous improvement toward recognized best practices; and,
  - build credibility and trust with communities of interest.



# TSM Elements and Indicators

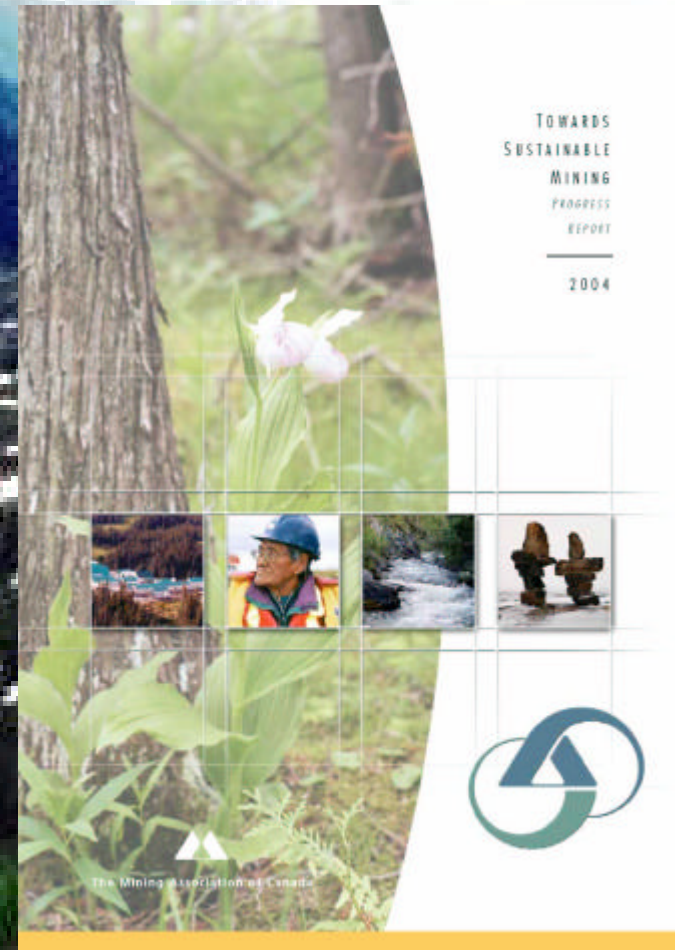
- **Corporate Crisis Communications (Yes/No)**
  - Corporate crisis management preparedness
  - Annual review
  - Training
- **Corporate External Outreach**
  - COI identification process
  - Effective COI communications and engagement process
  - COI response mechanisms
  - Reporting on external outreach
- **Energy Use and GHG Management**
  - Energy use and GHG management systems
  - Energy use and GHG emissions reporting systems
  - Energy intensity performance
  - GHG intensity performance
- **Tailings Management**
  - Tailings management policy and statement of commitments
  - Tailings management system
  - Responsibility for tailings management
  - Annual senior management review
  - OMS manual

# Reporting

- Outreach, energy and tailings measured, with criteria, on a five-level scale
  - No action has been taken; activities purely reactive, no systems in place.
  - Some actions, but sporadic and not fully documented; systems/processes planned and being developed.
  - Systems/processes are developed and implemented.
  - Integration into management decisions and business functions.
  - Excellence and leadership.

# MAC TSM Public Reporting

- Public reporting of MAC member assessments on performance indicators
  - *Towards Sustainable Mining Progress Report*
- Assessment protocols developed for 2005 reporting year
- External verification to start 2006 reporting year



# TSM Verification

- **Purpose:**
  - To verify that the reported company evaluation against TSM indicators reflects actual company performance.
- **Verification should:**
  - Assist member companies to develop capacity to monitor and conduct self-assessment of TSM implementation
  - Provide a basis for company assurance

# Program Attributes

- Seamless implementation
  - Facilitate incorporation into existing programs
  - Align with other reporting timelines
- Minimize verification costs and disruption to the operations
- Ensure MAC members and COIs can rely on the reported results



# Proposed Implementation

- Frequency
  - All companies for 2007 report (2006 data)
  - 1/3 of MAC members every year thereafter
- Scope
  - All indicators for identified companies
    - Verifiers' judgment used to determine the facility sample size needed to reach conclusion on all indicators for all identified companies.
  - Scope may change as new indicators added
- Timing
  - Calendar year reporting



# External Verification

## Proposed Elements

- Verification should be conducted by verifiers external to MAC and the individual companies;
  - MAC members will hire their external verifiers
  - Need for Verifiers Terms of Reference
- CEO Letter of Assurance
- Role for the COI Panel, if desired, e.g. post-verification review

# Possible ToR

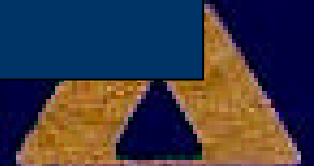
- Auditors' accreditation.
- Breadth and depth of experience:
  - Within the mining sector generally;
  - Some knowledge of the indicator areas being verified;
  - Track record;
- At least one degree of separation from scope of audit
  - Verifier cannot audit work s/he has consulted on
- Disclosure of other work performed for company
- Accept that company report may be shared with COI panel
- Requirement to participate in a TSM orientation workshop.
- MAC will maintain a list of companies that have participated in the TSM orientation workshop and of companies that have been involved in TSM verification activities

# Draft CEO Letter of Assurance

- "XYZ Mining Company has a process in place to verify the information provided to the Mining Association of Canada ("MAC") with respect to the Company's Towards Sustainable Mining ("TSM") Performance Indicators.
- The verification process consisted of an independent review performed by ABC Verification Ltd. The verifier assessed the company's TSM performance indicator results
- The verification confirms that the reported results for the period ending December 31, 2xxx accurately reflect the company's performance, (except for ...)."
- Anything else that a company chooses to disclose

# Next Steps

- **Verification Assessment Training Workshops for MAC members**
  - Fall 2005 (Toronto, Edmonton, Montreal)
- **Associate Members' Workshop**
  - Spring 2006
- **TSM Verification Workshops for Potential Verifiers in 2006**



# Benefits of TSM Performance Measurement

- Driving performance
- Refocusing and stimulating activity on performance gaps
- Drawing attention to goals and targets
- Creating a culture of achievement
- Identifying trends and comparing with others (peer pressure)
- Transparency
- Earning our social license

