# MAC Community of Interest Advisory Panel 2007 TSM Post Verification Review *Final Report*

September 26, 2007

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# TABLE OF CONTENTS

1	INTE	RODUCTION	2		
2	About the Towards Sustainable Mining (TSM) Initiative				
	2.1	Measurement and Reporting	3		
	2.2	TSM External Verification System	3		
3	COI	PANEL POST-VERIFICATION REVIEW PROCESS	4		
4 RESULTS OF THE COI PANEL 2007 TSM POST-VERIFICATION REVIEW					
	4.1	Albian Sands Post Verification Review	6		
	4.2	HudBay Minerals Inc. Post Verification Review1	3		
5	Key	LEARNINGS FROM THE POST-VERIFICATION REVIEW	9		
A	NNEX 1	: Weblinks	0		



# 1 Introduction

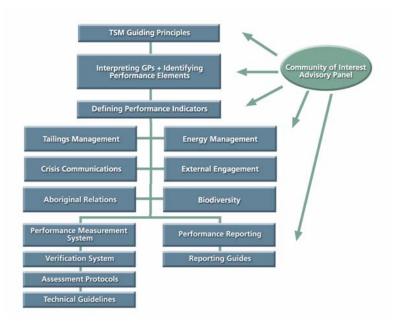
This report presents the results of the MAC Community of Interest Advisory Panel (COI Panel) post-verification review of Albian Sands Energy Inc. and HudBay Minerals Inc. Section 2 of the report provides important background on MAC's TSM initiative, the TSM external verification system, and the COI Panel's role in external verification. Section 3 outlines the post-verification review process and questions agreed to by the COI Panel. Sections 4 details the companies' response to these questions, and the ensuing discussion between the COI Panel and the companies. Section 5 discusses key learnings from the first 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 indicators

have been developed for tailings management, energy use and greenhouse gas (GHG) emissions management, external outreach and crisis management planning, and additional performance elements addressing Aboriginal relations, biodiversity, and closure are currently under development.

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:

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

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 1 to Level 5) for each indicator, and assessments are conducted for each Canadian operating facility. For crisis 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.

MAC has just released its third TSM Progress Report, available on their website (see **Annex 1**). These reports provide a detailed picture of member companies' TSM performance in the four areas outlined above.

# 2.2 TSM External Verification System

In the first two years of TSM reporting, the results published in the TSM Progress Reports were based on a company's self-assessments against the four sets of performance indicators. MAC's Board of Directors felt that self-assessment was a necessary first step to familiarize companies with the TSM indicators and the reporting process. However, the Board also recognized that it is crucial to assure MAC members and their communities of interest that reported results are consistent and accurate. As a result, the TSM initiative includes an external verification system that verifies that MAC members' assessments reflect actual company performance, assists members in developing the capacity to monitor and self-assess TSM implementation, and ensures



that MAC members and their communities of interest can rely on the reported results. Several groups were involved in the design of the verification system, including the Governance Team, Initiative Leaders, COI Panel, and several auditing and verification professionals.

The resulting TSM verification system is based on 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.

The verification system was implemented for the first time in 2007 with ten MAC members externally verifying their 2006 self-assessment results. In later years, companies will verify on a rotating three-year basis, with one-third of members externally verifying their results each year. New MAC members have three years to fully implement the self-assessment and external verification system.

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

The process for the first COI Panel post-verification review, undertaken in September 2007, was developed by a Panel and was based on the following elements:

- Purpose of the review: The COI Panel agreed that the purpose of the post-verification review is to lend public credibility to the TSM results by improving TSM (including the verification process), highlighting deficiencies and best practices, bringing cohesiveness in the application of the self-assessment and verification, and driving continued performance improvements. Some COI Panel members felt that it is important to determine whether the member companies are finding the verification process useful. If they are not, the process must be re-evaluated, or else companies may start "dropping the ball".
- 2. *The scope of the process*: The scope of the post-verification review included the verification process (design, etc.), the verified results, and lessons learned and changes needed to improve performance.
- 3. *The approach to the process*: The full Panel was involved in the post-verification review, with companies presenting their results and responding to a list of questions developed by the Panel (see item #6 below).
- 4. Company selection criteria: The Panel decided on Albian Sands Energy Inc. (oil sands) and HudBay Minerals Inc. (base metals) for the COI Panel's first post-verification review. These two companies represent a range of operations, a good geographical distribution, and a range of experience with community engagement.



- 5. Who should present the results: The Panel decided that both the companies' Initiative Leaders and verification service providers should be present during the post-verification review. In the case of Albian Sands Energy Inc. (Albian Sands), the verification service provider was out of the country at the time and unable to attend. For HudBay Minerals Inc., both the Initiative Leader and verification service provider were present during the post-verification review. Additional company staff also attended to provide expert support on the material presented.
- 6. *The Panel's specific information needs/expectations and questions to help companies prepare for reviews:* In lieu of making specific information requests, the Panel developed a set of questions that the companies were expected to answer:

## CONTEXT QUESTIONS

- 1. Can you explain to the Panel members the geographical relationship of the facilities involved in the TSM self assessments to nearby communities of interest, and what the Panel should understand about those communities of interest (demography, history in relationship to the mine, and economic base, notably in relation to the mining industry and the reporting company)?
- 2. What linkages did the company establish with communities of interest? Was there an economic (as well as environmental) basis for those linkages? Was the company able to maintain those linkages? Did the company's documentation make it possible to identify these linkages as part of the self-assessment/verification process?
- 3. Were there any specific problems (such as unresolved aboriginal territorial claims or assertions of adverse environmental impacts, of a current or historical nature) which clearly affected community relationships and the application of the TSM evaluations?
- 4. **A.** What was the company's experience of communication (i.e. in relation to crisis management, community outreach on environmental policy and related matters, and tailings management)?

### CONDUCT OF THE VERIFICATION PROCESS

- 4. **B.** Did you speak with communities of interest to verify the findings?
- 5. How did the response of different communities of interest influence the company's evaluation of its own performance? Are there any particular difficulties which were encountered and merit attention from the Panel?
- 6. Can you provide the Panel with how you evaluated crisis management, community outreach and tailings management what documents were used? How many people were involved in self-assessment?



### RESULTS AND LESSONS LEARNED

- 7. The Panel is aware of the importance of GHG and energy intensity indicators, but also knows that geographical and geological factors play a major and probably quite specific role in determining energy inputs. Do the records maintained for GHG/energy intensity accounting make it possible to see how these local factors are taken into account and addressed, and is this information available as part of community outreach activities?
- 8. Are there specific geographical and social/cultural circumstances which need to be taken into account in understanding the TSM evaluations for oil sands-based operations? Are there particular initiatives taken by the company which merit identification and discussion? How are communications issues involving tailings management (and effluent quality control) addressed as part of the company's outreach strategy? (Albian Sands).
- 9. For which indicators did the verifier have a different rating than the company's self assessment and what was the reason for this? What value did the company and the community gain from the conduct of/results of the verification? What has the company learned and what actions will it take to address these?

# 4 Results of the COI Panel 2007 TSM Post-Verification Review

The presentations prepared by Albian Sands Energy Inc. and HudBay Minerals Inc. are available on MAC's website (see **Annex 1**).

### 4.1 Albian Sands Post Verification Review

Celina Doyle and Darrell Martindale presented Albian Sands' response to the COI Panel's postverification review questions. They were supported by Sol Cifuentes who provided responses on energy management and climate change. A summary of their presentation and the COI Panel's ensuing discussion is provided below according to the three categories of questions.

### CONTEXT

The Athabasca Oil Sands Project consists of the Albian Sands - Muskeg River Mine, corridor pipeline, Scotford upgrader, and Scotford refinery. Albian Sands Energy Inc. is located in the Regional Municipality of Wood Buffalo (RMWB), the largest regional municipality in North America at 68,454 square kilometres and stretching from north central Alberta to the borders of Saskatchewan and the Northwest Territories. Albian Sands is designed to produce 155,000 barrels/day.

Approximately 20% of the population in the RMWB is of Aboriginal heritage. All land claims in the region have been resolved. Twelve percent of the population in the region is of employment age. The region experienced a 114% population growth from 1996-2006, and has an annual growth rate of 9.1%. The region has a "shadow population" of over 20,000 workers.



Albian's stakeholder engagement is driven by its Good Neighbour Policy, the objective of which is to develop a mutually prosperous, long-term relationship with people living in local areas – particularly neighbours, the First Nations and Métis people living close to Operations and Leases. Albian has had a community affairs office in Fort McKay since 2005 and an office in Fort McMurray since 2006, and has had staff at the mine site since the project's inception. These offices provide stakeholders with easier access to information about the company's operations. The company has an issues management resolution process in place.

Albian's stakeholder engagement model is based on "three D's" – Dialogue, Decide, and Deliver. The company maintains a full commitment tracking system that includes the status of commitments. Social, economic and environmental commitments are continuously reviewed and updated, including a quarterly review by senior management. The company communicates with its stakeholders through advisory committees, Regional committees and the Community Enhancement Society, as well as via public meetings, open houses, and newsletters and various other publications.

The company has an environmental incident management process in place that consists of a reporting manual and a site incident reporting system (SIRS). Albian's commitment to sustainable development is to comply with the law, conserve resources and prevent pollution, and continually improve environmental performance. The company has been ISO 14001 certified since 2003 and re-registered for ISO 14001 again in 2006.

Leadership and participation in multi-stakeholder committees and organizations is a key component of Albian's agreements with First Nations. The company has established links to its communities of interest in a number of ways. The company works with the Athabasca Tribal Council (ATC), which represents the interests of the five First Nations of North Eastern Alberta – Fort McKay First Nation, Athabasca Chipewyan First Nation, Mikisew Cree First Nation, Chipewyan Prairie First Nation, and Fort McMurray #468 First Nation. The Board of Directors of the ATC consists of the chiefs from these five First Nations, and receives funding from the government and industry. The Board meets quarterly to discuss regional issues. The ATC also consists of a number of committees that deal with specific issues such as education, employment and training, environment, finance and administration, youth, health and social issues, technical services, and economic development. Aboriginal and industry people sit on these committees.

The company also works through Industry Relations Committees (IRC), which are funded by industry. Each First Nation in the RMWB has an IRC. Each IRC has an Elders Advisory Committee and/or Advisory Committee, depending on the community. The purpose of the IRCs is to liaise with industry on behalf of First Nations, and to oversee all regulatory reviews (environmental and socio-economic) on behalf of each community. Many of the IRCs have put in place socio-economic, environmental, and community development plans. Some smaller communities that do not currently have these plans are working at putting them in place. The IRCs allow for a clear identification of who in the community the industry should engage and consult with, and how the community wants the industry to work with them.

In addition, the company engages with a number of Métis Locals within the RMWB, including Métis Locals in Fort McKay, Fort Chipewyan, Chard (Janvier), Conklin, Fort McMurray, and Anzac.

Relations with all of these groups are formalized using a variety of arrangements that depend on the community and how it is structured. Such arrangements include:



- Business alliance agreements;
- Principle-based consultation agreements;
- Environmental partnership agreements;
- Socio-economic agreements;
- Traditional environmental knowledge agreements; and
- Joint business development plans.

Other organizations with which industry is involved and in which Albian Sands participates include:

- Regional Issues Working Group (RIWG) industry funds specific committees and subcommittees to deal with issues that are common to all operations in the area (Housing, Aboriginal Relations, Environment, Transportation, etc.). RIWG also collects oil sands industry aggregate data and presents the results to governments and the public (e.g. how much the industry spends on local businesses, Aboriginal businesses, education and training, community investments etc.). The RIWG also prepares information on future development.
- Cumulative Environmental Management Association (CEMA) numerous multi-stakeholder sub-committees deal with environmental issues such as NOx/SOx, reclamation, etc. CEMA has been tasked to come up with targets for cumulative effects.
- Regional Aquatics Monitoring Program (RAMP) that shares the cost of water quality monitoring.
- Wood Buffalo Environmental Association (WBEA) monitors the air in the RMWB through a variety of air, land and human monitoring programs. The information collected is openly shared with stakeholders and the public.

# Panel Discussion

A Panel member asked how the company deals with consultation on the environment as oil sands mines continue to grow and change. Albian noted that environmental agreements are living documents – as commitments are met, new issues arise and the agreements are updated accordingly. Consultation and engagement is ongoing, and the company has quarterly work plans and targets related to these agreements. Each oil sands operation in the area has its own environmental agreements with communities, and each mine site must continually demonstrate its ability to receive regulatory permits as well as maintain its social licence to operate.

A Panel member asked which stakeholder groups would fall into each agreement category, how agreements are established, and whether stakeholders experience consultation fatigue. Another oil sands company noted that agreements are established according to the five First Nations in the ATC, as well as by Métis Locals. Engagement also depends on location/proximity to the operations. In terms of which agreements are made with which stakeholders, Albian noted that socio-economic commitments/agreements between First Nations and companies are not made public, at the request of the First Nations. It is the responsibility of the community representatives involved in setting up the agreements to share the information with their communities. It was noted that there are no specific agreements with southern communities in the region, since due to their location they do not have traditional land near the operations. In terms of consultation fatigue, Albian noted that the IRC's are set up to deal with this issue since they serve as a "single window" into the communities, and each community decides who, how and when they are going to deal with each company.



A Panel member requested more information on how socio-economic plans are developed. Albian noted that the company CEOs/VPs and First Nations Chiefs meet to discuss expectations regarding environment, employment, education/training, and socio-economic development, including what is in the community's interest and what is in the company's interest, and set out an appropriate plan to achieve these goals. As with the environmental agreements, socio-economic agreements are living documents, and change as new circumstances arise. A Panel member voiced concerns that there may not be sufficient capacity either at the company or the community level to keep track of all these commitments. Albian noted that the company has internal accountabilities set up for these commitments and maintains a commitments database. The IRCs are the communities' nucleus for keeping track of these plans and whether the company is meeting its commitments, and may have databases set up for this purpose.

With regard to the commitments database, a Panel member asked whether there is a mechanism to trigger a process when a commitment is not met. Albian responded that the company is involved in ongoing dialogue with all its stakeholders, and has not encountered a situation where a commitment has not been met. Sometimes commitments are refocused or renegotiated to deal with changing circumstances. Statuses of all commitments are reviewed each quarter with senior management.

One Panel member expressed concern that Albian is mixing up engagement and consultation, and noted that there is a difference between the two. Albian noted that it is regular business practice for senior management to consult on the status of operations and have on-going engagement.

### CONDUCT OF THE VERIFICATION PROCESS

When the TSM indicator measurement process began, Albian appointed an Initiative Leader (IL) as well as site and area-specific leads. Albian completed self-assessments in 2005 and 2006, and attended MAC's verification workshop in 2006. In addition, Pierre Gratton was invited to the Albian – Muskeg River Mine to hold a verification workshop with area-specific leads.

In preparing for this year's verification process, the company collected all relevant documentation and back-up to support its self-assessments. An RFP for a verifier was issued, and SGS was awarded the verification contract. SGS conducted the verification on-site from April 3-5<sup>th</sup>. The process included interviews with area leads (managers, team leads, engineers); review of legal, financial and regulatory documents, stakeholder meeting minutes, reports and back-up material; and a closing meeting with area leads and the company's COO. Additional documents were provided to the verifier the week of April 9<sup>th</sup> 2007 for tailings management and GHG and energy management (some documentation was kept at corporate headquarters (Calgary) and had to be shipped to the site).

# Panel Discussion

A number of Panel members asked whether the verifier spoke with any stakeholders during the verification process. Albian indicated that the verifier felt that the documentation provided was sufficient for conducting the verification, and did not speak with any stakeholders. Many Panel members expressed the opinion that it is important to interview community members and stakeholders, not only so their views are taken into consideration, but also to increase the general public's confidence in the process. Albian noted that interviewing community members and stakeholders was at the verifier's discretion, and if the verifier felt that the evidence provided was



ample enough to verify the company's self-assessment, then they need not engage external stakeholders. More discussion is needed on how the verifier would select stakeholders for inclusion in the verification process, given that many companies have long lists of stakeholders.

Another Panel member asked whether regular employees were interviewed through the verification process, or were at least canvassed to determine whether they know about TSM. Albian noted that other than the area leads, no employees were involved in the process; however, ISO 14001 audits involve more staff. This Panel member felt that more should be done to make employees aware of TSM.

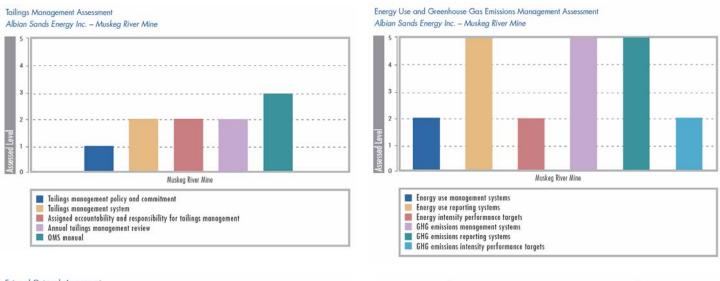
The question of verifier independence was raised, and a Panel member asked about SGS' relationship with Albian prior to the verification. Albian noted that there was no previous relationship between Albian and SGS, and that the company is very specific about conflict of interest. The Panel member indicated that any previous relationship between the company and the verifier would need to be clearly documented, in particular related to financial services provided. Pierre Gratton noted that one of the recommendations for next year is that the CEO letter of assurance will include a statement about the independence of the verifier selected.

A Panel member asked whether the company has been able to streamline reporting cycles between TSM and other requirements such as ISO. Albian commented that the company's ISO audit is in June, which did not coincide with the timelines for TSM. Panel members said they would like continued feedback from TSM reporters on their ability to integrate TSM reporting and verification/audit requirements in order to reduce reporting burden. The Panel would like to ensure that the burden is not so onerous that companies decide to quit TSM.



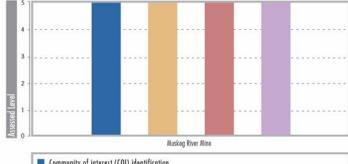
#### **RESULTS AND LESSONS LEARNED**

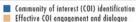
Albian's verified TSM results are provided below. The indicators for tailings management, energy use and GHG emissions management, and external outreach are assessed on a scale of "Level 1" (lowest) to "Level 5" (highest). Crisis management planning assessments are based on "yes/no" responses.

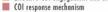


External Outreach Assessment

Albian Sands Energy Inc. – Muskeg River Mine

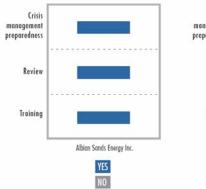












Crisis Management Planning Assessment Albian Sands Energy Inc. – Muskeg River Mine



The verifier agreed with all of Albian's self-assessment scores, although one correction had to be made to the ranking in the final report regarding energy management systems to align with verification on site – this criteria was assessed at "Level 2' by the company, but "Level 3" by the verifier. The verifier agreed to change the final assessment to "Level 2".

In terms of energy and GHG management, the company did well in the reporting systems indicators, but did not meet intensity targets because the company went through a scheduled outage and operational update that resulted in two months of the targets not being met. Albian ranked low on energy management systems as well. The company is focused on increasing its portfolio of activities to manage energy, with offset projects as well as energy efficiency measures in its own processes. Performance on tailings management was lower than expected, and it was noted that some relatively simple steps should lead to improved results (e.g. documentation).

## Panel Discussion

A Panel member asked whether the verified TSM results have prompted any changes at the company. Albian stated that the company has a plan to improve documentation on tailings management, as well as the intention to relocate some of the company's key documents from corporate headquarters to the mine operation.

A Panel member questioned whether the company's GHG estimates include employee bus transportation, since the magnitude of the GHG emissions generated from employee bussing is likely significant. Albian indicated that the company reports all direct process emissions as well as internal indirect emissions from electricity and internal transportation use. However, indirect emissions generated *outside* the company (such as external (offsite) transportation emissions) are not currently captured. One Panel member felt strongly about the need for an accurate calculation to verify carbon credits from more efficient public transportation that would allow a company to get credit. Albian noted that employee bus transportation in the oil sands is much more efficient than the car-based commuting used in urban and suburban areas.

The Panel asked whether the company has working arrangements with other oil sands producers to ensure sector consistency in reporting on GHG and tailing. Albian indicated that staff in all the oil sands producers who are responsible for these areas meet on a regular basis.



# 4.2 HudBay Minerals Inc. Post Verification Review

Shirley Neault and Stephen West presented HudBay Minerals' response to the Panel's postverification review questions. They were supported by Robert Duda of Managed Process Consulting Inc., who had conducted the external verification. A summary of their presentation and the COI Panel's ensuing discussion is provided below according to the three categories of questions.

## CONTEXT

For the 2006 reporting year HudBay Minerals Inc., subsidiary Hudson Bay Mining and Smelting Co. Limited (HBMS), reported as one facility covering the Flin Flon and Snow Lake operations in Manitoba as well as the Zochem zinc oxide plant in Brampton, Ontario. This accounts for all of HudBay's Canadian operations.

The populations of Flin Flon (and neighbouring Creighton) and Snow Lake are approximately 9,000 and 1,200, respectively. The Aboriginal populations in both locations equal approximately 14% of the total population. Relationships with the communities were established over 80 years ago when the company began operating in the area, and continue to function well. However, since most of the company's interactions with stakeholders have been based on informal processes, HudBay recognized the need for a more formal approach to COI engagement.

The city of Brampton has approximately 324,395 residents, of which 1,720 are Aboriginal. The company uses a more localized "neighbour" approach to COI engagement since the Zochem facility is located within an industrial park where it is of little concern.

HBMS has employed over 47,000 individuals since 1927, approximately 2,820 of whom have achieved a minimum of 25 years of service. According to a 2006 employment equity report, 8.5% of HBMS employees are female, 6.8% are Aboriginal, 4.1% are persons with disabilities, and 2.7% are part of a visible minority.

HBMS' operations are located in small, close-knit communities where a large proportion of the population works with the company. Management personnel reside in the communities, and are often approached directly with questions or concerns. General stakeholder engagement is often informal and does not get inputted into the company's formalized system. However, specific complaints and concerns, whether received informally or through the formal processes that the company has had in place since 2004, will be recorded in the formal system.

COI's are identified through engagement that has been ongoing for over 80 years, as well as through brainstorming sessions that incorporate reviews of current external communications and relationships. Formal communications are delivered internally on a monthly basis, as required by specific projects, and via participation in external committees (e.g. Healthy Flin Flon).

Flin Flon and Snow Lake have no First Nations presence in the immediate area, which has posed a challenge regarding Aboriginal recruitment and employment. Most Aboriginal employment opportunities are therefore indirect (e.g. equipment rentals, project-specific general labour, etc.).

Most First Nation engagement occurs during the exploration and development phase and is handled by Hudson Bay Exploration and Development Company Ltd. (HBED). HBED meets with



band chiefs and/or councils to explain permits and associated restrictions, and to provide the opportunity for communities to raise issues or concerns and to indicate how the company is responding to these concerns. HBED encourages contractors to hire local people for jobs such as packing snowmobile trails, line-cutting, etc.

## Panel Discussion

A Panel member asked whether there are any challenges related to demographic changes in the communities where HudBay operates. HudBay noted that there is an evolution towards an aging population, but so far there have been no major challenges (e.g. there are enough young people to keep the schools open).

A Panel member asked whether Flin Flon, Creighton, and Snow Lake are communities with a strong NGO presence and engagement. HudBay noted that while there are few NGO organizations, there are a number of active individuals in the communities that the company works with, as well as a local Environment Council. One Panel member raised the concern that the company does not appear to be dealing with women's organizations. HudBay indicated that they are not aware of any women's associations in the area.

A Panel member raised the issue of closure planning, and asked whether HBMS has a closure plan in place and whether any studies have been done to determine what will happen to the local economy when mining operations cease in Flon Flon/Snow Lake. HudBay noted that while the Flin Flon town council has discussed this issue, there is no sense of urgency since mining operations are continuing and an exact closure date has not been determined. However, the Flin Flon town council does talk about other industries that the community can promote and rely on other than mining, such as tourism and forestry. HudBay commented that the closure date for the Flin Flon/Snow Lake operations is uncertain because of the richness of resources in the area and the potential for additional exploration and discovery, which has been the case over the past 80 years. While the mine does have a standard closure and reclamation plan in place, a formal communityfocused or socio-economic closure plan would be developed once it is more apparent the operations will cease. A Panel member noted that it took 15-20 years to develop the communitybased closure plan in Kimberley (BC) for the shut-down of Teck Cominco's operations.

A few Panel members asked whether HBMS has had any feedback or input from communities on its new formalized COI engagement system. HudBay noted that some pieces are still being implemented this year, and that while stakeholders are probably aware of the company's complaints reporting procedure since it has been in place for three years, it is probably too soon to measure feedback on the overall engagement system. HudBay also noted that most of the changes in the system relate to more stringent documentation of engagement activities and practices that have been in place for a long time.

A Panel member asked how the company recruits employees from local rural areas. HudBay noted that the Human Resources department meets regularly with community colleges in both La Ronge and The Pas to inform students of employment opportunities with the company and the training required to fill those positions. However, most people do not want to leave their homes, or travel long distances to work. The company has an active apprenticeship program with current membership around 30. Retention of participants as full-time employees depends on whether they are locals – locals are more likely to stay, non-locals are more likely to move on. HBMS'



overall turnover rate is less than 3%, which speaks to the general stability of the community and the relationship between the company and the community.

Another Panel member asked whether the company has the opportunity to go into schools and colleges to talk about TSM. HudBay noted that they speak to high school classes taking an environment course, and that the company works with students who want to do environmental or sustainability-related projects. Shirley added that the company also supplies people to judge school science fairs, and that the local union goes to schools to talk to students about how to protect themselves on the job.

### CONDUCT OF THE VERIFICATION PROCESS

HBMS' verification process was conducted by Robert Duda, who attended the Panel meeting. He indicated that in his verification of the TSM performance he looked for the presence, adequacy, and implementation of processes. Performance on crisis management planning, external outreach, and tailings management were evaluated through extensive document reviews followed up with onsite interviews (15-20 people). A list of documents reviewed for each area is summarized below:

-       Emergency preparedness element       -       Tailings policy       -       Communication element         -       Emergency procedures manual table of contents and verifier       -       Tailings training and operations manuals       -       Management review minute         -       Emergency procedures manual table of contents and verifier       -       FFTIS emergency procedures       -       COI list and procedure	External Outreach	
- Potential emergencies chart approval report	nt inutes	



With regard to external outreach, the verification included interviews with all key HBMS individuals involved in managing external COI relations. The decision was made that COIs would only be contacted during the verification process if the reported level was greater than "3" – HBMS achieved "3" for all external outreach indicators, so no COIs were contacted. For the same reason, COI's were not contacted during the self-assessment. As a result, there were no COI responses that influenced the self-assessment or verification.

## Panel Discussion

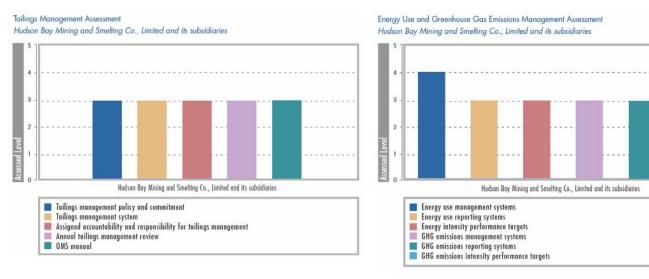
The issue of verifier independence was raised again, and a Panel member asked about the verifier's relationship with HBMS prior to the TSM verification. The verifier, who was present at the workshop, noted that he did not provide any services to HBMS prior to the verification, but cautioned that the universe of potential verifiers is very small and, while it is important that the conditions around independence be rigorous, it is equally important that they not be so restrictive that they make the majority of these verifiers ineligible to provide TSM verification services (e.g. doing EHS work for a company should not make a verifier ineligible to conduct verification, but work on specific TSM indicators probably should). The Panel member noted that independence may be more critical in terms of financial services provided.

A Panel member asked whether the verifier provided specific recommendations to HudBay. The verifier indicated that verbal recommendations were provided to the company. He also noted that all of the verifiers have made recommendations to MAC on how the TSM protocols and verification system can be improved. Panel members discussed the challenge in the tailings management protocol regarding the requirement to have a tailings management policy in place that has been developed or reviewed in consultation with external stakeholders. For example, a company may have a formal tailings management policy that was put in place before any requirements to consult with external stakeholders, and the question is whether these companies now have to go out and consult on these policies in order to reach a "Level 3" for this indicator. The MAC Tailings Working Group has confirmed that consultation is an important component of this indicator. Some companies need to work with the Tailings Working Group to understand this requirement and communicate the obstacles.

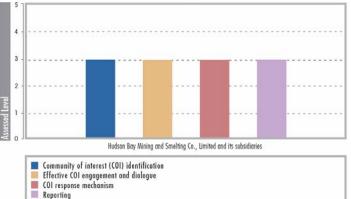


#### **RESULTS AND LESSONS LEARNED**

HudBay's verified TSM results are provided below. The indicators for tailings management, energy use and GHG emissions management, and external outreach are assessed on a scale of "Level 1" (lowest) to "Level 5" (highest). Crisis management planning assessments are based on "yes/no" responses.



# HudBay Minerals Inc.





Crisis Management Planning Assessment

Crisis Management Planning Assessment Hudson Bay Mining and Smelting Co., Limited and its subsidiaries



Stratos

External Outreach Assessment

Hudson Bay Mining and Smelting Co., Limited and its subsidiaries

There were no differences between HBMS' self-assessment ratings and the externally verified results. The verification confirmed existing gaps, and also identified industry best practices as well as increased management attention to the importance of TSM performance. A commitment to continuous improvement will enable the company to address the gaps identified. For example, the company realizes that its plans to move to "Level 4" performance hinges on more strongly engaging stakeholders, some progress on which was made in 2007 (e.g. implementation of a COI contact log).

Panel members asked about the local factors affecting the energy and GHG intensity indicator results. HudBay said that electrical energy is purchased from Manitoba Hydro and is generated largely by hydroelectric dams. HBMS also uses petroleum-based fuels, as there is no access to natural gas (except at Zochem). It was noted that the records maintained for GHG/energy intensity indirectly demonstrate how these local factors are addressed, and further information is available through the company's sustainability reports, the company section of MAC's TSM reports, and reporting to Environment Canada.

# Panel Discussion

A Panel member asked whether the TSM results have prompted any changes at the company. HudBay noted that as a result of TSM assessments, the company has put in place a crisis management plan, and formalized its approach to stakeholder engagement.

There was some discussion around the company's energy use. HudBay is the second highest user of electricity in Manitoba, and purchases electricity at a low rate of 3.2 cents/kWh, among one of the lowest rates in Canada. However, the use of hydrocarbon based fuels is necessary in some processes (e.g. to fire the principal reverbatory furnace in the smelter). Coal was used for many years, but the emissions and efficiency became a concern and the company switched to heavy fuel oil or propane. Other energy alternatives (e.g. wind) are not viable due to cost. Since HudBay Minerals Inc. is a fully integrated company (that is, involved in all aspects of the industry from exploration, mining, concentration, making metal, making a secondary product at Zochem, and selling products) its energy needs are larger and more complex than for a company that is involved in fewer aspects of the industry.

A Panel member wondered whether the company has considered building its own hydroelectric facility nearby. HudBay noted that the company once operated its own dam in Saskatchewan, but in 1980 the water licence was not renewed. The company has had to improve its energy efficiency to mitigate the new cost of buying power from the grid. The company has also reduced the volume of propane and heavy fuel oil used in the smelter, and is conducting a trial using biodiesel on underground equipment.

Panel members noted that HudBay's energy and GHG management results are quite strong, with the exception of targets. HudBay commented that the company appeared to be lacking GHG targets because it was focusing on reducing GHG emissions through using less energy, and none of the documents explicitly mentioned that reducing energy use would also reduce GHG emissions. A more explicit link has now been drawn between the two.



# 5 Key Learnings from the Post-Verification Review

*The verification process was a success*: The majority of COI Panel members thought that the first post-verification review went very well and that TSM has "passed its first test" with the first round of verification. The process also offered positive learning opportunities both for the COI Panel and for the company representatives. Overall, the COI Panel was pleased with the presentations from Albian and HudBay, and impressed with the depth and serious attention paid at the sites to the verification process. MAC members of the COI Panel noted that the depth and breadth of questions from the COI Panel demonstrate how serious the Panel takes its role in TSM.

**TSM is driving real performance improvements**: The design of TSM is applicable to a broad range of companies, and companies are using the verification results and process to drive real performance improvements.

*Communities of interest need to be more involved in verification*: There is a weakness in the existing verification system with respect to external outreach and interaction with communities of interest. The current involvement of communities of interest in the verification process is insufficient and needs to be strengthened.

*Top performers still need to be encouraged*: The concern was raised that companies scoring high in the TSM assessments may not be encouraged to continue to make performance improvements beyond those outlined in the protocols – what are they supposed to do next? It was pointed out that maintaining high levels of performance is also challenging.

*The need for context*: A great deal of context is required to understand what is being reported and why, and there needs to be an effective way of capturing and communicating contextual information to all audiences, including communities and the broader public.



# **Annex 1: Weblinks**

#### COI Panel Information:

www.mining.ca/www/Towards Sustaining Mining/Community of Interest Panel/Community of Interest Panel.php

Detailed Assessment Protocols: www.mining.ca/www/Towards\_Sustaining\_Mining/Performance\_Indicators/index.php

2006 TSM Progress Report: www.mining.ca/www/ news/news 406.php

TSM External Verification System Information: <a href="https://www.mining.ca/www/Towards\_Sustaining\_Mining/External\_Verification/Introduction.php">www.mining.ca/www/Towards\_Sustaining\_Mining/External\_Verification/Introduction.php</a>

Presentations prepared by Albian Sands Energy Inc. and HudBay Minerals Inc.: <a href="http://www.mining.ca/www/Towards\_Sustaining\_Mining/External\_Verification/Introduction.php">www.mining.ca/www/Towards\_Sustaining\_Mining/External\_Verification/Introduction.php</a>

