

## Unpacking the Mining Association of Canada's Towards Sustainable Mining Program

-Joan Kuyek, Ontarians for a Just Accountable Mineral Strategy, October 31, 2019.

Ontarians for a Just Accountable Mining Strategy (OJAMS) is voluntary association of people from diverse communities and interests in Ontario that want to see a mineral strategy that

- Sustains the environment and the resources for future generations,
- Protects the public from the risks associated with mining, smelting and refining,
- Heals the damage already caused by the industry
- Captures a fair share of the revenues generated by the industry for Ontarians and First Nations, and
- Respects the rights of First Nations to free, prior, informed consent to development on their lands

This paper provides a critique of the Mining Association of Canada Towards Sustainable Mining (TSM) initiative from the perspective of communities affected by mining impacts.

The TSM webpage describes the initiative's objectives as follows:

*[Towards Sustainable Mining]'s primary objectives are to drive performance improvement and, through demonstration of this improvement, to build trust with communities of interest. This means that communities need to understand TSM and trust the performance results that the mining companies report. To build this trust, the program includes a number of checks and balances to ensure that reported results present an accurate picture of each facility's management system and performance. (Towards Sustainable Mining, mining.ca)*

We ask: to what extent is the TSM process worthy of that trust?

### ***Introduction***

The Towards Sustainable Mining (TSM) initiative of the Mining Association of Canada (MAC) is one of the more sophisticated iterations of voluntary Corporate Social Responsibility (CSR) programs in the mining sector.

Introduced in 2004, TSM has now been evolving and in operation for fifteen years. Until 2018, it produced an annual public report on the TSM progress of MAC members. In 2019,

MAC has decided to cease the annual report and instead have participating companies report directly on line. It has also updated and modified its “Guiding Principles”. (see Appendix A)

TSM is a voluntary Code of Conduct for mining companies. The standards and indicators are developed by the mining company association for their members. Although a company has to agree to participate in TSM in order to belong to MAC, after fifteen years of the program just over one half of MAC companies and their facilities report. They are only required to report on facilities in Canada. For those that do report, there is no penalty for poor grades and no failing grade at all.

*Sustainable Mining* is an oxymoron. Mining is not – and cannot be – sustainable, as it depletes the very resource it depends upon. It is a rapid, ferocious and continuous assault on the earth no matter how carefully it is done. It is a waste management industry, leaving behind massive amounts of tailings and waste rock that will, in most cases, be toxic and have to be managed forever in order to prevent them from poisoning aquifers and surface waters. The corporate members of the Mining Association of Canada are major contributors to global warming and climate breakdown, not only through their energy consumption and greenhouse gas (GHG) emissions, but also through the very products they produce, such as coal and other fossil fuels.

As the industry tells us repeatedly, we do need fossil fuels, minerals and metals, and our economy has been created around the extraction of oil, coal, industrial minerals, gems and metals. Transition to a sustainable economy – “one that meets the needs of the present without compromising the ability of future generations to meet their own needs” – means a massive paradigm shift away from activities like mining towards closed-loop ecologically responsible economies that heal the damage already done. It means challenging the very power and authority of the mining industry.

This report is organized as follows:

- A History of Towards Sustainable Mining
- Regulatory vs. voluntary standards
- How the TSM process is structured
- A critique of TSM assessments

- Beyond the TSM: an ecosystem approach
- Can the mining companies reporting to TSM be trusted? (company-specific critiques)

### *A History of TSM*

The last quarter of the 20<sup>th</sup> century saw an unprecedented expansion of the mining industry around the world, using open pit technologies to cut costs, intruding into more remote areas, affecting more marginalized communities, trashing large swaths of the ecosystem and rewriting mining laws in over 100 countries to suit industry needs.

Affected communities, Indigenous Peoples, workers and civil society organizations fought back, using new internet technologies to share their stories and strategies. Community conflicts and labour strikes multiplied. As their effectiveness increased, it began to restrict mining industry access to land and resources, to labour, to water and capital. The industry had trouble getting and keeping workers. Investors became increasingly worried not only about this “social licence to operate”, but also about undeclared liabilities (and their duty of care) after a number of catastrophic pit wall and tailings dam failures at large mines. Governments, which had changed their mining laws to attract mining investment, found that regulators were unable to protect the public purse, workers and the ecosystem from the industry and were being faced with insurmountable costs at closure.<sup>1</sup>

The mining industry was caught off-guard by the power of this growing opposition to their projects. In 2000-2001, led by Rio Tinto and other multinational mining companies, the companies engaged the International Institute for Education and Development (IIED) to carry out a global “consultation”, called Mining, Minerals and Sustainable Development (MMSD). In 2001, the report of this world-wide consultation was published, called “Breaking New Ground”. To urge companies to implement the report recommendations, the companies formed the International Council on Mining and Metals.

The pressure on the mining industry from communities, workers and NGOs supporting them continued. Following MMSD, the World Bank Extractive Industries Review (2004) was undertaken; many different Standards and Codes were created: the Initiative for Responsible Mining Assurance (IRMA), the Global Compact, the International Cyanide Code, and the

Extractive Industries Transparency Initiative, amongst others. Activists from all over the world found themselves sitting with industry and governments at a number of national and global “consultations” and on “multi-stakeholder” committees to develop standards and programs by which industry would agree to abide. How effective these industry- and government-driven initiatives could be in actually stopping the pillage by and pollution from mining companies was a huge question.

In Canada, where at this time more than 75% of mining capital was raised, the national mining lobby – the Mining Association of Canada – responded with its own CSR plan – Towards Sustainable Mining (TSM) – in 2004.

### ***Regulatory vs Voluntary Standards for mining companies***

In their thorough legal analysis of corporate social responsibility, Kerr, Janda and Pitts say that the benefit of regulation is that it “levels the playing field” requiring compliance from all corporate actors, so that “corporate laggards” are forced to take action.<sup>2</sup> It prevents a race to the bottom. Regulation is more likely to protect the environment and society over business interests and drive positive change where upfront costs for industry are high. It ensures the public reporting of negative results as well as positive ones. Most importantly, it provides punitive mechanisms designed to secure compliance.

However, they continue, “regulatory frameworks targeting the corporate sector are often plagued with wide-spread non-compliance as a consequence of business evasion, inadequate sanctions, limited enforcement resources or political will to enforce.” This non-compliance has become worse with the growth of corporate power. Voluntary standards, they say, are more flexible, less cumbersome for companies and have lower compliance costs for corporations.

The authors make the point that “Voluntary initiatives should not be proposed and adopted as substitutes for regulation or used as justification for dismantling regulatory capacity,” as this can lead to regulatory capture.

The weaknesses in voluntary corporate responsibility programs include the following:

- Most companies will opt out of the standards.

- Companies can pick and choose the standards and indicators on which they wish to report, and it is extremely difficult to see where they have been adapted to the company's own interests.
- Companies can select their own interpretation of those standards and indicators that they do choose.
- Where companies operate through subsidiaries or partnerships, they may omit to report on some of these.
- The choice of which data to reveal in the report, and how to present it is made by the company; raw data is usually considered proprietary and is not publicly available.
- The data collected for reporting purposes is entirely compiled by the company and/or by contractors chosen by the company.
- Where "independent" audits of the company's performance are presented, they are usually done by a consulting company hired by the company and paid by the company with the company as the client. Most of the consultants hired rely on the industry for their livelihoods.
- There are no consequences or penalties for non-compliance.

***What are the key features of Towards Sustainable Mining?***

The MAC has 43 full members, and a number of associate members. The full members include major players in the Alberta tar sands, including Suncor, Syncrude, Canadian Natural Resources Limited and Teck. It includes the Canadian subsidiaries of transnationals headquartered outside of Canada such as ArcelorMittal, Anglo-American, Rio Tinto, Glencore, Vale and Newmont. There are a number of small and medium sized mining (and tar sands) companies and some of the few remaining Canadian majors: Barrick Gold, Iamgold, Cameco, Yamana Gold and First Quantum. (For a list of 2019 members see Appendix B.)

Since 2018, MAC has required that members with operating facilities in Canada ensure those facilities participate in TSM, although new members and/or new facilities have three years before they have to report. The last year for which a TSM progress report was published was 2017, and this analysis is based on that report. In 2017 (after 13 years of TSM), only 23 (just over ½) of the member companies reported on a total of 67 facilities.

Most mining companies in Canada are not MAC members. One of these is Taseko Mines Ltd, which left MAC in 2018, as the company did not want to participate in TSM.

TSM reporting is organized by Protocols and Frameworks. These are all available on the MAC website. The footnotes to this paper provide links to the actual documents. The categories for reporting and the indicators for each one are briefly described below.

Each protocol contains the caveat that: *This assessment protocol provides an indicator of the level of implementation of proactive outreach and engagement practices as part of the TSM initiative. It is not, of itself, a guarantee of the effectiveness of [the named category] activities...*

- Aboriginal Engagement and Community Outreach<sup>3</sup>

*The Aboriginal and community outreach protocol contains four indicators:*

1. *Community of Interest (COI) Identification*
2. *Effective COI Engagement and Dialogue*
3. *COI Response Mechanism*
4. *Reporting [on the process to COIs and to the public]*

- Energy Use and GHG Emissions<sup>4</sup>

*This protocol assesses the level of implementation of energy use and GHG emissions management... It is not, of itself, a guarantee of the effectiveness of energy use and GHG emissions management activities...*

*Performance Indicators:*

1. *Energy use and greenhouse gas emissions management systems*
2. *Energy use and greenhouse gas emissions reporting systems*
3. *Energy and greenhouse gas emissions performance targets*

This protocol also notes: *Recognizing that energy use and GHG emissions are not a material business risk for all companies and facilities, a materiality threshold has been incorporated*

*into the energy use and GHG emissions management protocol. Facilities whose GHG emissions (as a sum of Scope 1 and Scope 2 emissions) are less than 25kt of CO<sub>2</sub>e or whose on-site energy usage is less than 250,000 GJ, are not required to report on indicators 1 or 3 of this protocol.*

- Tailings Management<sup>5</sup>

*The Tailings Management Protocol (the Protocol) provides five indicators to measure the quality and comprehensiveness of systems for tailings management...*

*1. Tailings management systems*

*2. Emergency response plans (ERPs)*

*3. Emergency preparedness plans (EPPs)*

*4. Annual tailings management reviews and*

*5. [Having] operations, maintenance, and surveillance (OMS) manuals. The Protocol is supported by two documents prepared by MAC: A Guide to the Management of Tailings Facilities (the Tailings Guide); and Developing an Operation, Maintenance, and Surveillance Manual for Tailings and Water Management Facilities (the OMS Guide). These guides provide further specificity on expectations to meet performance Indicators described in the Protocol.*

- Biodiversity Conservation Management<sup>6</sup>

*Three performance indicators have been established:*

*1. Corporate biodiversity conservation commitment, accountability and communications*

*2. Facility-level biodiversity conservation planning and implementation (which appears to require data on actual flora and fauna populations)*

*3. Biodiversity conservation reporting*

- Safety and Health<sup>7</sup>

*The Safety and Health Protocol contains five indicators:*

1. *Commitments and Accountability*
2. *Planning and Implementation*
3. *Training, Behaviour and Culture*
4. *Monitoring and Reporting*
5. *Performance* (which appears to report on actual lost time injuries and industrial deaths)

- Crisis Management and Communication Planning<sup>8</sup>

*This assessment protocol provides an indicator of the level of implementation of crisis management planning in support of the TSM initiative and is not, of itself, a guarantee of the effectiveness of crisis management planning activities...*

*Three performance indicators have been established:*

1. *Crisis management and communications preparedness. Member companies must have in place a crisis management and communications plan*
2. *Review. Member companies will regularly review and update their crisis management and communications plan to ensure it remains responsive to the needs of the company and its operations, properly reflects risks associated with the company's operations and reflects best practices within the industry*
3. *Training Crisis management training, including the use of appropriate crisis simulation exercises, will be conducted annually*

- Preventing Child and Forced Labour<sup>9</sup>

*The protocol sets out the general approach taken to confirm that processes are in place to ensure that neither child nor forced labour as defined by ILO conventions are occurring at TSM participating facilities. This protocol provides an indicator of the verification approach to ensuring child and forced labour are not used and must be used in conjunction*



*with the TSM Verification Service Provider Terms of Reference. It is not, of itself, a guarantee of the effectiveness of labour practices.*

For 2018, facilities were also required to report on Water Stewardship and Mine Closure Frameworks.

- Mine Closure Framework<sup>10</sup>

*The framework includes eight elements, which go beyond legal compliance. Through this framework, MAC members have committed to working with communities to develop closure plans and strategies to mitigate the socio-economic impacts of mine closure. In addition, the framework also encourages companies to help communities develop plans for long-term economic development and to work with communities of interest to identify values that are important to the community and incorporate those values into reclamation objectives.*

- Water Stewardship.<sup>11</sup>

*The Mining Association of Canada's (MAC) Water Stewardship Protocol is the newest addition to its Towards Sustainable Mining initiative and will be phased-in over the next several years, with public reporting scheduled to begin in 2021. This Protocol will strengthen the standards included in TSM and will guide the development of water stewardship practices in a manner that will go beyond legal compliance... The new Water Stewardship Protocol ...is comprised of four performance indicators:*

- 1. Water Governance*
- 2. Operational Water Management*
- 3. Watershed-scale Planning*
- 4. Water Reporting and Performance indicators*

### ***Critique of the TSM Assessment Process***

TSM reporting is based on a facility having in place protocols and management systems to address each of the above categories. Best Practice management systems (frameworks) have been developed by MAC and provide a standard against which companies grade their

performance. The actual performance of these frameworks on the ground (where it is even required) is only one small component of the grade.

As an example, the most detailed of the TSM framework is for Tailings Management. MAC has had a Guide to the Management of Tailings Facilities in place since 1998 (following a series of high-profile tailings dam collapses at Canadian mines in the US, the Philippines, Guyana and Spain). Since that time, that guide has been updated twice. There is also a guide for companies to develop a mine-specific operations manual. TSM Performance indicators accompany these documents and seek to drive MAC members towards using Best Available Technologies (BAT) and Best Available Practices (BAP) in building, maintaining, monitoring and closing tailings facilities.

However, the industry BAT and BAP recommendations are based on what is “economically achievable” and stop short of saying the security and safety of a tailings facility must trump any costs to make it so. That is, they refrain from saying that the mine should not operate unless it can ensure the tailings facility is absolutely secure, preferably with a filtered tailings system or better.

On August 4, 2014, one of the tailings dams at the Mount Polley Mine in British Columbia collapsed, releasing 25 million cubic metres of water-saturated tailings laden with selenium, lead, and other metals into Polley Lake, Hazeltine Creek, and Quesnel Lake. Polley Lake and Hazeltine Creek were destroyed, and tailings ended up in Quesnel Lake. Imperial Metals – a MAC member at the time – was operating a mine that was marginally economic and which has since closed. Since late 2018, Imperial is no longer a MAC member.

An Independent Review Panel struck by the province of British Columbia to look at the causes of the collapse and to make recommendations said:<sup>12</sup>

*Many in the industry have reacted to the Mount Polley failure with incredulity, asking how it could have happened with programs such as MAC's in place. This serves as a reminder that these programs should not instill a sense of overconfidence and cannot themselves be seen as a substitute for more fundamental changes in technology. The Panel would require a bankable feasibility study and related permit application to have considered all technical, environmental, social and economic aspects of the project. Resolution of technical and environmental considerations would usually be supported by proven methods, although technology development studies would not be precluded if they*

*have advanced far enough to warrant implementation in practice. The bankable feasibility study would be of sufficient detail to support an investment decision that might have an accuracy of  $\pm 10\%$ – $15\%$ .*<sup>13</sup>

What becomes clear with this example, and there are many others, is that companies depend on the TSM indicators to build public trust and ensure they can get access to land, capital and labour, but they are all carefully crafted to balance their impact on the corporate bottom line. As another example, the Aboriginal and Community Outreach Protocols and Indicators are about systems for consultation and do not address the desire of Indigenous Peoples and communities to say a flat “no” to a mining project, nor do they look at restitution for lands that have been occupied (and often destroyed) without consent.

All TSM facility-specific indicators ignore the often ongoing historical impacts of the facilities, the need for healing and restitution and the cumulative impacts on environment, governments and societies of extractive companies over time. For example, the TSM reporting for tar sands miners Canadian Natural Resources Limited, Suncor and Syncrude does not address:

- regulatory capture of the Alberta government<sup>14</sup>
- liabilities for orphaned and abandoned oil wells and exploration sites
- air pollution from the oil sands that is the worst in North America<sup>15</sup> and
- the on-going very serious health effects on residents of Fort McKay and other nearby First Nations<sup>16</sup>

The TSM Community of Interest panel is an advisory group, selected by MAC, to provide feedback on TSM and to share concerns about the mining industry. For MAC members, it provides an opportunity to understand what Indigenous Peoples, environmentalists and faith communities are saying about the industry, to identify opposition early on, to get their spin right before civil society can organize and to cultivate key supporters amongst their usual critics. The choice of categories for assessment has been designed to address hot button issues coming from the industry’s “communities of interest”. Climate change, water stewardship, relationships with Indigenous Peoples, environmental stewardship were all being raised by the COI as challenges to

the industry's Social Licence. The MAC website incorrectly says that the COI Panel "oversees" the TSM reporting. They don't.

How is the TSM grading established? There is no "F", and the marks run from C to AAA. There are no penalties as long as the facility "participates". The grading is as follows:

*AAA: Excellence and leadership*

*AA: Integration into management systems and business functions*

*A: Systems/processes are developed and implemented*

*B: Procedures exist but are not fully consistent or documented; systems/processes planned and being developed*

*C: No systems in place; activities tend to be reactive; procedures may exist, but they are not integrated into policies and management systems.*

Companies grade their participating facilities based on the indicators provided by MAC. New members and facilities get a three year "phase-in" before they have to publicly report.

Every three years, the results must be verified by a Verification Service Provider (chosen and paid for by the company from a list provided by MAC), who can change the grading if required. The audit looks at documents provided by the company. The company CEO posts an assurance letter that the verification was done. Annually, the results of the grading and the verification (if done) are posted to the MAC website. From CEO Letters of Assurance on the TSM website, it appears that Robert Duda of Managed Process Consulting is hired most frequently to do these audits. The Community of Interest panel also has an opportunity to meet with and talk to two companies each year about their results; this is called a Post Verification Review.

The public has no access to information about the TSM results other than what is posted on the MAC website, as the data on which the report is based belong to the company.

### ***Beyond the TSM: An ecosystem approach***

Questions about sustainability have to take an eco-system approach, to de-centre mining, to put mining in its place. The kinds of indicators needed become very different; they deal with

the externalized costs and benefits of the industry. They need to ask about the need and purpose for the project, the eventual footprint of the mining project, life cycle responsibility and materials conservation, impacts on health, labour and inequality, about impacts on governance, about social licence and relationships to communities and Indigenous Peoples, and – perhaps most importantly – to ask if the management of the company be trusted to report accurately and fully.

These are questions that vary greatly from the TSM indicators. The 2001 MMSD North American division report puts the question clearly:

*If there is a fundamental question underneath all others, it is the question of whether society – or the world – “needs” any given project or operation. ... The question arises because of growing concern that current human activity is undermining the capacity of future generations to meet its needs. This concern is a central driver of the sustainability/sustainable development set of concepts and the issue is very simple: why do something that is undermining the capacity of future generations?*

Here are some examples of the questions that need to be asked to put mining in its place:

#### The Need and Purpose for the Mining Project

- What is the need for the metal/ mineral/gem that the company produces? We already have enough gold and diamonds. We should not be mining more coal or uranium. Should we be leaving the oil in the ground?
- Is what is manufactured with the mining product socially useful? Is it used for jewellery? If for infrastructure – what kind?
- Where does the company sell the metals they produce? Are goods made from these minerals sold to repressive regimes for the purposes of war and aggression?

#### The Footprint of the Mine Project

- What will the ultimate footprint of the mining project be? What are/will be the lost economic and ecosystem opportunities?
- What are the transportation impacts, costs and subsidies for the company? Can they be handled safely?

- Do the mine and its products contribute to environmental degradation?

### Life Cycle Responsibility

- Does the company take responsibility for the full lifecycle of the minerals it mines? Does it recycle what it produces? (Although TSM Guiding Principles refer to recycling, it is not included in any of the indicators).
- Is the project depleting resources that will be needed by future generations?

### Impacts on Health, Labour and Equality

- What are the community and worker health impacts related to the operation?
- What is the company's relationship with its workers and what are the issues of concern? Are they unionized?
- Does the company practice and encourage gender equality? What are the employment conditions of women?
- Does the project enhance equality of income and a fair distribution of power?

### Impacts on Governance

- What role does the company play in the economy of the regions and countries where it operates? What kind of role does it play in shaping the mining, environmental and investment laws in host countries?
- What role does the company play in shaping labour laws in the regions and countries where it operates?
- What taxes does the company actually pay and to what levels of government? What subsidies has it enjoyed? For taxes? Infrastructure? Water? Energy? What are the impacts of these subsidies on the people in the host countries?
- What has been the stance of the company, or other associations to which it belongs, to enhanced regulation and enforcement of environmental and labour laws? Is the company lobbying against environmentally/socially/culturally responsible practices?

### Social Licence and Indigenous Peoples

- Has the company displaced traditional peoples or Indigenous Peoples with its operations? If so, what restitution has there been? Were there protests? How did the company deal with them?
- Is there racial harassment and discrimination at the workplace: Are there incidents? What were they? How does the company deal with it?

#### Can the company management be trusted?

- What is the history of company management?
- In those places where the company has closed mining operations, what has been the long-term economic results for the community? Are there long-term environmental impacts? Has the company fully paid for remediation and perpetual care? Does the company have mines that they abandoned?
- How transparent is the corporate structure? Is it organized to obscure accountability and avoid taxation?
- What accidents and emergencies have there been in the past few years? How does the company respond? What is the critique of its response? What are the long-term consequences for the people and the environment?

#### ***Can the companies reporting to the TSM be trusted?***

##### *Summary comments on company 2018 progress reports*

Analyzing the effectiveness of specific corporate codes of conduct is an impossible task without the resources to visit the mines, mills, smelters, infrastructure and communities where the companies operate. In order to even superficially critique TSM, we have relied upon our relationships, developed over years of solidarity work, with communities and organizations on the ground. People who work in the mines, smelters and refineries will have very different information about what is happening.

Without the power of forensic investigation and the resources to carry it out, getting at the truth of these stories is almost impossible, especially when the mine owners can limit access, intimidate the workers and local populations and spin the presentation of their stories.

In the company comments below, the author has flagged some concerns about the mining companies reporting to TSM for affected communities and governments.

The company TSM reports are all available online on the MAC website (mining.ca). In 2017 (the last year for which the reports are available), 23 of 43 MAC members reported on 67 facilities. Of these, 24 facilities had their results externally verified as part of the three-year verification cycle. Although TSM is only required for facilities in Canada, some MAC members reported on international operations.

The reports are reviewed in the order in which they appear in the Progress Report 2018.

### **Agnico-Eagle**

Six of its mines were granted the TSM leadership award for 2017. The company reported on all its operating mines, Goldex, La Ronde and Meadowbank in Canada, two in Mexico and one in Finland. The company says:

*During the second external verification, Agnico Eagle's operations achieved at least a Level A performance under all TSM Protocols... Agnico Eagle's Mining Reclamation team won the Tom Peters award for outstanding achievement in the practice of mine reclamation in Ontario. The award was presented by the Canadian Land Reclamation Association for their innovative work on safely rehabilitating a decades old mineshaft without disturbing the site's designation as an important historical resource as part of the Cobalt Mining District National Historic Site of Canada.*

What is missing from this commentary is the information about three of its projects in Cobalt, Ontario; Malarctic, Quebec; and Baker Lake, Nunavut.

Cobalt: The company says: "Agnico-Eagle got its start in Cobalt Ontario." The tailings wastes from almost 100 years of mining were deposited in lakes and rivers, and Cobalt now has one of the highest concentrations of arsenic in water anywhere in Canada. It is estimated that the amount of arsenic discharged into Lac Temiskaming ranges from 10 to 18 tonnes – "more than all the operating mines in Canada combined."<sup>17</sup> Agnico-Eagle does not accept responsibility for this toxic soup.

Malarctic: In June 2014, Agnico Eagle and Yamana Gold acquired Osisko and created the Canadian Malartic General Partnership that owns and operates the mine. Agnico Eagle and Yamana each have an indirect 50% ownership interest in the Partnership. In 2008–09,



exploration by Osisko Mining revealed an untapped gold deposit, estimated at approximately nine million ounces, beneath the town of Malartic. At the time, there was little effective opposition from townspeople to the project, and the company received approval from the government of Quebec to launch what would become Canada's largest ever open-pit gold mine. It opened in 2011. Over two hundred homes were relocated to the north side of town and their owners compensated. In September 2016, the owner, Canadian Malartic, put a voluntary compensation process in place. The “Good Neighbour Guide” outlined the terms and conditions under which residents could be compensated for “annoyances caused by dust, vibrations, overpressure, and noise.” However, for most residents, as the pit grew, the situation became untenable, and, in October 2017, they launched a lawsuit demanding that they be relocated elsewhere. None of this is mentioned in the TSM report.

Meadowbank Mine, Nunavut. Also missing is the fact that in 2017, Agnico Eagle Mines Limited was fined \$50,000 under the federal Fisheries Act for failing to report a spill at its Meadowbank mine site near Baker Lake, Nunavut. The fine stems from a spill discovered by an Indigenous and Northern Affairs (INAC) site inspector in July 2013.<sup>18</sup> The mine, which opened in 2010, has had numerous spills of toxic chemicals into a trout-bearing lake, but has not reported them.

### **Arcelor-Mittal Canada**

*ArcelorMittal is the leader in all major global steel markets, including automotive, construction, household appliances and packaging — with leading research and development (R&D) and technology, as well as sizeable captive supplies of raw materials and far-reaching distribution networks. It is headquartered in Luxembourg,*

The only facilities it reports on to the TSM are its Quebec facilities. (Baffinland, a subsidiary, reports separately.) ArcelorMittal operates a mining complex at Mont-Wright, a mine at Fire Lake, a crusher-concentrator, as well as a 420-kilometre railway, a pellet plant, port and rail workshops in Port-Cartier. At 24 km<sup>2</sup>, this is the largest mine in Quebec, and one of the biggest tailings facilities in Canada.

The mine was opened by Quebec-Cartier Mining in 1973 (when the Town of Fermont was built) and sold to Arcelormittal in 2008. Fire Lake Mine opened in 2008. It took until 2012 before an agreement was reached with Uashat mak Mani-Utenam Innu Nation, the traditional landholders. The company gave itself a B on Aboriginal and Community Outreach-Community Response Mechanism at Mont Wright and Port Cartier in 2017; no details are provided.

In other parts of the world, like South Africa, ArcelorMittal is notorious for its poor labour relations. In April 2019, NUMSA, the South African metal workers union struck, protesting contracting out practices that prevented workers from being considered permanent. Thousands do the same work as permanent employees, but earn less and have no benefits.

### **Baffinland Iron Mines Corporation**

Since 2011, this company has been a private subsidiary of ArcelorMittal. Its sole operation is the Mary River Property on Baffin Island. It went into operation in 2015, after extensive negotiations with Inuit corporations Nunavut Tunngavik Inc. (NTI) and the Qikiqtani Inuit Association (QIA), as well as to the Government of Nunavut. Really tough negotiations from 2014-2017 saw the Nunavut Impact Review Board initially refusing the project over environmental and royalty concerns. The company submitted an environmental impact statement that seriously underestimated the extent of the footprint of the project.<sup>19</sup> Although the company gave itself a B for Aboriginal and Community Outreach-effective COI engagement and Dialogue in 2017, there were no consequences from MAC.

### **Barrick Gold Corporation**

In 2018, Barrick had mining operations in Argentina, Australia, Canada, Chile, Dominican Republic, Papua New Guinea, Peru, Saudi Arabia, the United States, Tanzania and Zambia. More than 75% of its gold production came from the Americas. The company was founded in 1983 by Canadian entrepreneur Peter Munk and is headquartered in Toronto. In 2019, Barrick purchased Randgold Resources, and Randgold CEO Mark Bristow became CEO of Barrick.

In Canada, its only operating mine is at Hemlo (the Bell and Williams Mines) in Ontario. *The Hemlo mining operation is located approximately 46 kilometres east of Marathon, Ontario, and has produced gold continuously since 1985. The operation includes an underground mine and open-pit mine complex with a processing facility. Several years ago, the Hemlo operation entered a new phase of its productive life with the purchase of adjacent lands, increasing the site's mineable reserves. The site's mine life is now extended until 2027 with the possibility of additional expansions.* This is the only mine Barrick reports on in TSM.

Hemlo is on the lands of the Biigtigong Nishnaabeg (Pic River First Nation). The community has no revenue sharing agreement with Barrick, although a few band members work there.<sup>20</sup> At one point, the community had to replace their water treatment plant to remove cyanide from their water supply.

The unverified Barrick report for Hemlo gives a B for many of the performance measures in Safety and Health, a C for measures in tailings management, for performance on GHG emissions, for biodiversity conservation and management. C is the lowest available grade in TSM. The Barrick report to TSM says nothing about its activities in the rest of the world which have been well documented by civil society.<sup>21</sup> (See protestbarrick.net.) It also says nothing about the impact of Barrick's intensive lobbying efforts against the regulation of its operations overseas and for the protection of tax havens. However, the company continues to be a member of MAC.

### **Cameco Corporation.**

Cameco is one of the world's largest providers of uranium fuel. It has operations in Canada, Kazakhstan and the United States, including mines (underground, open pit and in situ), mills and refineries. In this progress report, Cameco reports only on its Key Lake and McArthur River operations in northern Saskatchewan, which mine and process the highest-grade uranium ore in the world. It does not report on Cigar Lake Mine. With the exception of its reporting on GHGs, it gives itself an AA or AAA in all categories.

What is not included in this reporting is information about the growing and devastating footprint of the uranium mining in Saskatchewan, regulatory capture of the Canadian and

Saskatchewan governments, an on-going lawsuit in Canada over a \$2.2 billion tax evasion through the use of transfer pricing;<sup>22</sup> problems with sexism at its Cigar Lake Mine; and a number of spills and incidents from Cameco operations. (See list compiled and verified by Friends of the Earth Australia in April 2017.<sup>23</sup>)

### **Canadian Natural Resources Limited (CNRL)**

The 2017 TSM reporting is only for its subsidiary, Albian Sands Energy Inc, although CNRL is one of the largest holders of tar sands projects in Alberta. Albian Sands operates the Muskeg River Mine and Jack Pine Mine near Fort McMurray, Alberta. The two mine sites are adjacent to one another. They are part of the Athabasca Oils Sands Project (AOSP). CNRL purchased 60% of the project from Shell in early 2017.<sup>24</sup> This purchase was part of an ongoing divestiture of oil sands ownership by major international companies.

The company gives itself an AAA for aboriginal and community outreach, tailings management and biodiversity conservation. In the TSM progress report, they say that, in 2017, they contributed to the Continuing Care Unit at the Northern Lights Regional Health Centre in Fort McMurray and the refurbishment of the community Clinic at Conklin, as well as supporting Indspire.

The CNRL TSM reporting (as for other oil sands mining companies in MAC) is stunning for what it does not address: the use of temporary foreign workers, regulatory capture of the Alberta government,<sup>25</sup> air pollution from the oil sands that is the worst in North America,<sup>26</sup> and the on-going very serious health effects on residents of Fort McKay and other nearby First Nations.<sup>27</sup> (See Suncor and Syncrude for more on tar sands.)

### **Debeers Canada**

*De Beers is a member of the Anglo American group. Established in 1888, De Beers is the world's leading diamond company with unrivalled expertise in the exploration, mining and marketing of diamonds. Together with its joint venture partners, De Beers employs more than 20,000 people (directly and as contractors) across the diamond pipeline, and is the world's largest diamond producer by value, with mining operations in Botswana, Canada, Namibia and South Africa.*

However, the TSM report is only for the Victor Diamond Mine in northern Ontario (now closed) and the Gahcho Kue Mine in the Northwest Territories.

De Beers claims that over the life of the Victor mine, \$820 million went to Indigenous and local businesses in northern Ontario. In addition, it says it paid \$110 million in royalties to the government of Ontario and another \$100 million in corporate social investment and payments to communities.<sup>28</sup> However, Victor operated for less than eleven years, yielding 8.1 million carats of diamonds. The diamonds from Victor were exceptionally high grade and were valued at between US\$171 and \$400 per carat.<sup>29</sup> Even assuming the low-end price of CDN\$200 a carat, gross revenues to the company were over \$1.6 billion. The return to affected Indigenous Peoples and governments has been pathetically low.

Attawapiskat First Nation, the most affected by Victor, received \$1.2 million from DeBeers in 2017.<sup>30</sup> And, in return, they were faced with sewage backups, a housing crisis exacerbated by people returning home to seek work at the mine, increased mercury in the river from which they draw their water supply and despair amongst the youth. In 2011-2012, Chief Theresa Spence declared a State of Emergency over housing and water issues in the community and helped fuel the Idle No More Movement.

The company's self-evaluation shows an AAA for community engagement. TSM does not report on economic contributions to communities.

### **Dominion Diamond Corporation**

In November 2017, the year of the progress report, Dominion Diamond Corporation was purchased for \$1.2 billion by The Washington Group from Missoula Montana and became a private company. It owns 100% of the Ekati Mine (originally built by BHP-Billiton) and 40% of the Diavik Mine (with Rio-Tinto).

Opened by BHP-Billiton in 1998, Ekati was the first of the diamond mines in the Northwest Territories (NWT). The diamond mines have had dramatic effects on caribou and on the people of the NWT.<sup>31</sup> The Bathurst caribou herd has declined by 74% in the twenty years since the mines opened. Although global warming may have contributed to the decline, there is no doubt the mines and their infrastructure were also major factors. Ekati started out as one pit, and is now six open pits and three underground mines, with waste rock, processed kimberlite

piles, a mill, roads, airports and camps. The mine is a constantly expanding assault on the land, no matter how carefully it is monitored.

In the TSM report for 2017, the company report was externally verified, and it received a AAA for biodiversity conservation and management.

As the mine reaches the end of its economic life and the diamond grades drop,<sup>32</sup> the ability of each successive company to meet obligations at closure is questionable.

### **Excellon Resources**

Excellon has no Canadian operations but volunteered to report on its Platosa Underground mine in Mexico. They state: “We report because we believe that these indicators drive CR excellence and because openness and transparency are core values.” In 2015, the company was in a huge struggle with landowners in the area of its proposed mine and with the unionized workforce. When a complaint was made to the Canadian CSR counsellor, the company refused to cooperate, and the counsellor did not proceed.<sup>33</sup> During 2017, the company undertook a public relations offensive, as they could see that on-going battles with local people and their workers were affecting their financial position. They also realized they needed to improve tailings management.

The company’s TSM grades (unverified) were in the B to C range, with promises to improve in the future.

### **First Quantum Minerals**

First Quantum Minerals, reports to TSM on its Canadian mines – all of which are currently closed – and also reports on its Cayeli Mine in Turkey on a voluntary basis. The results were externally verified. All seven facilities did poorly on Aboriginal and Community Outreach (except Cayeli, which got AAA), on Safety and Health, on Tailings Management, Biodiversity and Conservation Management and on Energy Use. No penalties or consequences were stated.

There is no mention of other First Quantum properties in Zambia, where in early 2018 the Zambian government sued First Quantum for \$7.6 billion in unpaid royalties and benefits. This was settled out of court in July 2019 after First Quantum threatened to close the mine. Nor is mention made of their massive Cobre Panama Mine and its infrastructure, bought from Inmet in

a hostile take-over in 2013, which was near completion at the time of the TSM report. First Quantum also has mines in the DRC, Finland, Spain, Peru and Mauritania.

## **Glencore**

A Swiss-based multinational trading company, the company's operations comprise more than 150 mining and metallurgical sites, oil production assets and agricultural facilities.

Glencore's Canadian mining operations have participated in TSM since 2004 (through previous owners). The company reports that the following facilities have implemented *TSM*:

### *Glencore Copper*

Horne Smelter, Rouyn-Noranda, Quebec

Canadian Copper Refinery (CCR), East Montreal, Quebec

### *Glencore Nickel*

Sudbury Integrated Nickel Operations (INO), Sudbury, Ontario

Raglan Mine, Nunavik region, Quebec

### *Glencore Zinc*

Brunswick Smelter, Bathurst, New Brunswick

Kidd Operations, Timmins, Ontario

CEZinc Refinery, Valleyfield, Quebec

Matagami Mine, Matagami, Quebec

Glencore has been the subject of several scathing reports written by affected communities and NGOs. Its impacts have been well documented by an NGO called Public Eye,<sup>34</sup> and by a Swiss- South American group of sixteen organizations called the Observadero Glencore.<sup>35</sup> Its tax dodging was exposed in the Paradise Papers and Glencore's abuse of unions around the world has been documented by Industriall,<sup>36</sup> which has a Glencore Global Union campaign.

In May 2015, Multiwatch published a report on Glencore highlighting the impacts of the company on communities and the environment entitled, "3 Billions from the Exploitation of Raw Materials by the Swiss multinational corporation, Glencore Xstrata." Multiwatch, based in Switzerland, is a forum of non-governmental organisations, labour unions and anti-globalisation movements. Its mission is to observe multinational corporations registered in Switzerland, to raise awareness of human-rights violations by multinational corporations and to campaign for

stringent corporate accountability in terms of human rights. Glencore sued them for libel after the report was published.<sup>37</sup>

The report states:

*People who have been adversely affected by mining activities associate the corporation with exploitation and the destruction of their environment and their human habitats. Open-cast areas of extraction are blighted by gigantic holes and miles of pipelines. Local communities have complained of the noise from blasts and of health risks due to air pollution and toxins that have seeped into their soils and drinking water supplies. Many host mining communities have been denied the right of consultation; protests by workers and local populations have been criminalised or violently suppressed. ...Glencore Xstrata has variously been criticized that it has divided communities or co-opted government structures by contracting the police force, as in Peru, for example. In terms of its trade with agricultural products, it has been accused of profiteering from hunger. ... The corporation has also been subject to investigations into tax evasion.*<sup>38</sup>

Glencore's TSM results were almost all AAA. In 2017, Raglan Mine was selected as a finalist for the 2017 *TSM Community Engagement Excellence Award* for the Tamatumani program, a skills development initiative that has contributed to the training and hiring of hundreds of Nunavimmiut. The Raglan Mine has become a poster child for TSM. The conditions there are largely a result of very tough negotiating by Makivik Corporation, the Inuit economic development corporation in Nunavik.

## **Goldcorp**

In 2019, Goldcorp was bought out by Newmont, becoming part of what is now the largest gold producer in the world, and now reports as Newmont Goldcorp. However, in 2018, it only reported to the TSM on the Éléonore Mine in Quebec. The introduction to the report says that Musselwhite, the Red Lake Mining District and the Porcupine Camp in Timmins will undergo verification in 2019, as will operations in Cerro Negro in Argentina. For Éléonore, all indicators were A to AAA except for energy use, which received a B in the performance category.



In 2019, the new company announced plans to sell the mines in the Red Lake Mining District where the company got its start. The district has produced more than 29 million ounces of gold since 1949. Evidently, Musslwhite and Porcupine Camp are also on the block.<sup>39</sup> Now that the ore is being mined out, the company that profited is seeking to sell them off.<sup>40</sup>

The company's origins are in northern Ontario, where its first mines were on the territory of Lac Seul First Nation. For decades, the First Nation received no benefits whatsoever from the lucrative mines. Arsenic trioxide from the old roasters is stored underground, and there is an arsenic plume in the aquifer near the town of Balmerton.

Goldcorp has been the developer and operator of some of the most fiercely opposed mines in Latin America: the San Martin heap leach gold mine in Honduras, the Marlin Mine in Guatemala, the Tahoe Resources Mine in Guatemala, and the Penasquito Mine in Mexico.

## **Hudbay**

The TSM report from Hudbay says:

*For 90 years, Hudbay has worked toward the goal of translating responsible mining into positively impacting people's lives, local communities and broader regional economies. Our experience in building strong relationships and making a valuable contribution wherever we do business guides us as we expand our presence in the Americas. When Hudbay started in 1927, our operations were based in Manitoba and our primary market was North America. Today, our company is international and our market is global.*

The HudBay TSM report addresses performance at the Manitoba Business Unit in Flin Flon and Snow Lake in Manitoba and the South American Business Unit (the Constancia project) in Peru. Through 2017, the company states that its performance is "particularly good in the areas of community outreach, biodiversity management and health and safety management." It gave itself a B for Aboriginal Outreach in Manitoba but said this was due to "gaps in stakeholder engagement record-keeping."

There are a number of serious problems with Hudbay's performance that escape the TSM approach. Historically, the copper smelter in Flin Flon was one of the most significant sources of lead and mercury pollution in North America. When the company was faced with having to clean up their act, it shut it down. The mercury contamination of the soils and sediments in the area is horrific.<sup>41</sup>

Currently, Hudbay is partnering with Amarc to explore the Ike project on Tsilhqot' in territory in BC. The area is in Dasiqox Park and is considered sacred land to the First Nation.

In Arizona, despite enormous opposition from local people and conservation groups Hudbay has continued to try to permit the Rosemont Mine. A federal court just found against the company.<sup>42</sup>

Nearby the Constancia Project in Peru, MiningWatch Canada staffer Jen Moore and filmmaker John Doherty were arrested and prevented from showing Doherty's film about Hudbay, called Flin Flon Flim Flam in April of 2017.<sup>43</sup>

Members of the indigenous Mayan Q'eqchi' population from El Estor, Guatemala are pursuing three related precedent-setting lawsuits in Canadian courts against Canadian mining company HudBay Minerals over rapes and human rights abuses in 2007 at HudBay's former Fenix mining project in Guatemala. Hudbay continues to fight these cases every step of the way.

## **Iamgold**

Iamgold has participated in the TSM initiative in Canada and at the company's international operations since 2007. External verification of the company's 2017 *TSM* performance was completed for three Iamgold-managed operations (Essakane in Burkina Faso, Rosebel in Suriname and Westwood) as well as the corporate head office in Toronto. Only Westwood – an underground mine grading 10gpt of gold – is in Canada (near Rouyn, Quebec). Other Iamgold Mines – Sadiola and Yatela in Mali – are winding down and are not mentioned. At the Mali mines there has been considerable conflict with the government and rebel forces in recent years. Nor is there any reference to the company's investment in the hotly contested INV project in Ecuador.<sup>44</sup> Since all these projects are not in Canada, the reporting to TSM is voluntary, and the choice of mines to report on is strategic.

Iamgold is about to build a huge low-grade open pit gold mine in Ontario, Coté Gold.<sup>45</sup> The property is 516km<sup>2</sup> in size. The mine will require the draining of a lake and the damming and realignment of three other lakes. In the mine plan, the water saturated tailings area and the waste rock dumps dwarf the open pit. The mine is being built with the proceeds from the sale of its mine in Ghana to Trelawney Exploration, a sale that resulted from concerns about "resource nationalism."

## **Imperial Metals Corporation**

After reporting to TSM for 2017, Imperial dropped its membership in the Mining Association of Canada. Imperial is a BC mining company active in base and precious metal acquisition, exploration, development and mine operation. Imperial has three mine operations in BC producing copper and gold, with silver and molybdenum as by-products. Imperial's property portfolio includes Red Chris (100%), Mount Polley (100%), Huckleberry (50% interest, non-operating partner (currently under care and maintenance), Ruddock Creek (50% interest), and Sterling (100%) in Nevada.

While still reporting to TSM, the Mount Polley Mine was the site of the worst tailings dam disaster in Canadian history on August 4, 2014. In 2017, Imperial only reported on the Mount Polley Mine, and gave itself an A for Aboriginal and Community Outreach and Tailings Management.

There was no reporting on its other Canadian projects.

## **New Gold**

New Gold is an intermediate gold producer with operating mines in Canada (New Afton Mine – British Columbia and the Rainy River Mine – Ontario), the United States (Mesquite Mine), and Mexico (Cerro San Pedro Mine). In 2017, it submitted unverified reports on New Afton, Cerro San Pedro and Western Mesquite. New Afton and Rainy River are their Canadian Mines and the only obligatory ones for reporting. For some reason, the only report on Tailings Management was for New Afton (AAA).

## **Nyrstar**

With head offices located in Zurich, Switzerland, Nyrstar is a global multi-metals business specializing in lead and zinc and base metals. It has two mines in Canada: Myra Falls in BC and Langlois in Quebec. Myra Falls is located inside Strathcona Provincial Park. From 2015-2018 it was on care and maintenance due to low commodity prices. As a result, the company only reported on Langlois, another marginal mine. The results were not good, with tailings management, biodiversity conservation and energy use grading C (the lowest possible score).

## Rio Tinto

One of the world's oldest mining companies, Rio Tinto has been around for over 140 years. It now has over 15,000 people working in 35 locations. In 2017, it announced that its Montreal office would serve as the global hub for its aluminium operations. The Canadian operations that report to TSM include the Iron Ore Company of Canada (IOC), the Diavik Diamond Mine and RioTinto Fer et Titane (RFTF). Rio Tinto does not report on any of its other operations.

In Canada, the Innu First Nations of Uashat Mak Mani-Utenam (Uashaunnuat) and Matimekush-Lac John (MLJ), whose traditional territory (Nitassinan) covers all the IOC claims, much of northeastern Quebec and Labrador, filed a motion to obtain an injunction against IOC mining operations in Quebec and Labrador as well as damages for the harm caused to them by IOC, estimated at \$900 million.<sup>46</sup> IOC's majority shareholder is Rio Tinto.<sup>47</sup> The Innu had never been in favour of the mining developments on their territory, which had taken place for decades and caused untold devastation.<sup>48</sup> *In 2014, a train owned by IOC fell into the Moisie River while carrying diesel fuel, resulting in the death of the driver, the contamination of the river, and increased Innu environmental concerns....Historically, the Moisie River has been at the crossroads of Innu culture and an important part of Innu land, as they moved and adapted to the seasons for thousands of years.* The court case has dragged on due to technical interventions from provincial governments and the company and was heard by the Supreme Court of Canada in early 2019.<sup>49</sup> There is as yet no decision.

No mention of this case is made in the Rio Tinto report. The 2017 TSM grade for Aboriginal and Community Outreach was AAA.

Globally, Rio Tinto has been one of the main drivers of the CSR movement in mining. This results from their need to respond to organized opposition to company impacts over a number of decades, initially networking as PARTIZANS (People against Rio Tinto Zinc and its Subsidiaries). In 2015, the US-based Corporate Research Project published a brief profile of the company online, listing charges against the company.<sup>50</sup>

With Freeport, Rio Tinto was involved for decades in the Grasberg Mine in West Papua which has been dumping 200,000 tonnes of waste into the Ajkawa River every day for years. In

2018, Rio Tinto sold its shares to the Indonesian government for \$3.5 billion and assumed no liability for remediating the tailings.<sup>51</sup>

At Bougainville, RioTinto has been involved in the Panguna Mine in one way or another for decades. It is one of the richest gold mines in the Pacific but closed because of a rebellion by the people and an ensuing civil war. In 2016, Rio Tinto transferred their shares to the autonomous Government of Bougainville and the government of Papua New Guinea. However, Rio Tinto is now working to reopen the mine.<sup>52</sup>

More recently, Rio Tinto has been faced with radioactive tailings dam leaks at the QMM Mine in Madagascar, and strong opposition to the Resolution Copper Project in Arizona which will destroy a sacred ecological haven called Oak Flat.

### **Suncor and Syncrude.**

Although competitors, these two companies are discussed together for this paper.

In the late 1970s, Syncrude and Suncor were pretty well the only operators in the oil sands, and production averaged 55,000 barrels per day (bpd).<sup>53</sup> By 2018, production from the oil sands was 2.9 million barrels per day. It is estimated that there are 162.5 bpd of reserves in the ground.<sup>54</sup>

The oil sands account for 11% of Canada's GHG emissions. Although the GHG emissions per bpd have dropped over the past ten years, the growing size of the tar sands nullifies this effect.

The mining method of extraction requires 2.5 barrels of fresh water per barrel of bitumen and the in situ method requires an average of 0.20 barrels of fresh water per barrel. Again, although water is recycled, evaporation and the growing size of the mines take their toll. Recycled water is increasingly contaminated.

The tailings ponds from oil sands mines cover an area the size of Vancouver. More than one trillion litres of tailings are held in the toxic ponds.

Alberta AER says the province is protected from abandonment of tailings ponds because Suncor, Imperial, Syncrude, CNRL and other companies are required to put money into a fund called the Mine Financial Security Program. The fund has collected more than \$1 billion from companies. The cost to clean up the oilsands mining operations facilities? An estimated \$130

billion, according to an investigative report, *The Price of Oil*, by *National Observer*, *Global News* and the *Toronto Star*.<sup>55</sup>

*A Syncrude report about Base Mine Lake shows that a water-capping experiment - using a water cover to control the impacts from the tailings - has not worked. After its first year of water-capping 2014, the lake was toxic and inhospitable to most aquatic life. Renowned scientist David Schindler says the report shows high levels of methane in the overlying freshwater as well as oxygen levels that no fish and few invertebrates could tolerate.*

The *Globe and Mail* reports:

*The Alberta oil sands is one of the most prolific sources of air pollution in North America, often exceeding the total emissions from Canada's largest city, federal scientists have discovered...The role of oil sands operations in generating secondary organic aerosols, a poorly understood class of pollutants that have been linked to a range of adverse health effects. The airborne data, supported by further work with computer models and laboratory experiments, show that 45 to 84 tonnes of secondary organic aerosols are formed by the oil sands a day. By comparison, Canada's largest urban area, which includes Toronto and surrounding municipalities, generates 67 tonnes a day, much of it derived from car and truck exhaust.*<sup>56</sup>

Regulatory capture is also a significant impact.<sup>57</sup> The *Tyee* reports that in parallel with MAC,

*The main lobby for the oil sands is the Canadian Association of Petroleum Producers, which advocates for less regulation, oversight and taxation as well as heavy subsidies to the industry. Writes Bruce Livesey: 'In Ottawa the oil industry employs a small army of lobbyists, far outstripping other interest groups on the hill. the lobbying is spearheaded by the Canadian Association of Petroleum Producers (CAPP) which represents 90 members and 150 associate members. CAPP alone has 38 registered lobbyists. ...CAPP and oil companies also hire some of the most powerful lobbying firms on Parliament Hill.*

*On top of that there are dozens of lobbyists working for the Canadian Energy Pipeline Association and Canadian Gas Association and individual oil companies.’ ...Kevin Taft, a former leader of Alberta’s Liberal Party (2004-08) believes so. He’s the author of a new book, [Oil’s Deep State](#). ‘In Canada, the fossil fuel industry has captured really key democratic institutions and in some ways has captured so many of them that it has formed what I call a deep state,’ explains Taft. ‘So democracy stops functioning for the people and begins to function first and foremost for the fossil fuel industry.’<sup>58</sup>*

## **Teck Resources**

All of Teck’s operations apply TSM, and all Canadian operations publicly report their TSM results. Teck’s Canadian operations include Highland Valley Copper and Trail operations in British Columbia as well as six steelmaking coal operations in British Columbia and Alberta: Cardinal River, Coal Mountain, Elkview, Fording River, Greenhills and Line Creek. Teck’s overall TSM results for 2017 were strong, and the company achieved high levels of performance across all six TSM Protocols. The company assigned all eight of Teck’s Canadian operations a Level AAA for all indicators of the Biodiversity Conservation Management, Energy Use and GHG Emissions Management, and Aboriginal and Community Outreach Protocols.

But what is missing? Here are a few examples:

- The enormous risk associated with water saturated tailings impoundments such as Highland Valley. The Highland Valley Copper Mine in British Columbia has an impoundment in a valley that is 9 kilometres long, with a tailings dam at the downstream end that is 165 metres high and 3.3 kilometres wide. The company intends to expand the dam by 2026 to over 210 metres high, to hold 2.6 billion tons of tailings.
- Downstream from Teck coal mines in BC, the level of selenium in the Elk and Fording rivers is 70 times that in the Flathead River, which doesn’t get run off from coal mines.
- In 2019, a US court found that Teck – which runs the world’s largest lead and zinc smelter at Trail about 10 miles north of the U.S. border in British Columbia – had for decades dumped slag containing hazardous substances including arsenic, cadmium,

- copper, lead, mercury and zinc into the Columbia River. The downstream tribes sued, won and were awarded costs for the action, with \$3.39 million for expenses, \$4.86 million for attorneys' fees and \$344,300 in prejudgment interest.<sup>59</sup>
- On February 29, 2016, Teck Metals Ltd. pleaded guilty to three offences under the Fisheries Act for the release of substances deleterious to fish in the Columbia River. The total fine was \$3,000,000 for the Fisheries Act offences. Teck Metals also paid \$400,000 in fines under BC legislation. All of the \$3,000,000 fine will be directed to the Environmental Damages Fund for fish habitat and fisheries restoration projects in the Kootenay River or Columbia River watersheds.<sup>60</sup> Teck Metals released a statement in response to the charges describing a total of nine incidents occurring between November 12, 2013 to February 5, 2015. The incidents involved discharges of water with elevated levels of zinc, copper, ammonia, chlorine and cadmium into the Columbia River.
  - In 2019, Teck is developing its first oil sands venture, the massive Frontier Mine. A joint federal-provincial Environmental assessment approved the mine, despite finding it will have significant and permanent impacts on the environment. Environmental concerns named by the panel include the removal of old-growth forests, the destruction or permanent alteration of fish habitat, the release of a large amount of carbon pollution and the loss of wetlands and areas of “high species diversity potential.”<sup>61</sup> [Note: Teck withdrew its application and cancelled the project in early 2020]

## **Vale**

An enormous transnational company based in Brazil, Vale (then known as CVRD) purchased INCO properties in Canada in 2006 for \$13.3 billion, including all the Sudbury operations, Voisey's Bay, Port Colborne and Thompson. In 2018, under TSM, the company gave itself A to AAA grades for all indicators at all facilities. It said: *Vale's biodiversity protection projects demonstrate how much the company prizes the planet. In 2017, the Ontario Operations were awarded the TSM Environmental Excellence Award for its biodiversity work in Sudbury, which focuses on greening and reclamation efforts to transform lands and waterways back to their natural states. Our Manitoba operations were also recognized as a TSM Environmental*



*Excellence Award finalist for their SLAM Dunk program, which aims to divert 100 per cent of waste from landfills.*

What the Vale report is remarkable for what it does not talk about:

- The dangerous state of its tailings dams: Two massive tailings dam ruptures at Vale mines in Brazil: at Samarco in 2015, which killed 19 people and destroyed homes and the Doce River, and at the town of Brumadinho in January 2019, which killed at least 240 people.<sup>62</sup> Following these dam failures, the company reported that many more were likely, as the same technology has been used for most of its tailings dams in Brazil, and at eight dams in Sudbury and one in Thompson Manitoba (These dams had been built by Inco).<sup>63</sup>
- Self-assurance against closure at its Sudbury operations of only \$647 million and 80,000 hectares of land disturbed by 125 years of mining and smelting.
- The closure of the Thompson smelter in 2018 when it was forced to comply with federal base metal smelter regulations
- A \$600 billion lawsuit from Atikameksheng Anishnabek for damages to their lands in the Sudbury area (currently on hold)
- The findings of The International Network of those Affected by Vale. The network has, since 2009, been comprised of a wide group of organizations, social movements and trade unions from Brazil, Argentina, Chile, Peru, Canada and Mozambique whose objective is to contribute to the strengthening of networked communities, promoting strategies to confront the socio-environmental impacts related to the extraction mining industry, especially that connected to the corporation Vale S.A. <sup>64</sup> In 2012, Vale was awarded the annual Nobel Award of Shame by the Berne Declaration and Friends of the Earth mainly for its role in helping to build the Belo Monte dam, the largest hydroelectric power plant in the Amazon rainforest, and a host of alleged labor rights abuses in dozens of countries worldwide. The award was presented during the World Economic Forum in the Davos, Switzerland. It named Vale as “the Worst Company in the World”.<sup>65</sup>
- Since Vale took over the Inco Mines in Sudbury in 2006, there has been a decline in the conditions of work. A peer-reviewed study published in 2017 found: *There is awareness of occupational exposures, but this awareness is dwarfed in comparison to the attention that is given to the tragic fatal injuries from injuries and accidents. The mines are now*

*owned by foreign multinationals with a change from an engaged, albeit paternalistic sense of responsibility for the health of the miners, to a less responsive or sympathetic workplace culture. Modernization has led to the elimination, substitution, or reduction of some of the worst toxins, and hence present-day miners are less exposed to hazards that lead to occupational disease than they were in the past. However, modernization and the drop in the price of nickel has also led to a precipitous reduction in the number of unionized miners, a decline in union power, a decline in the monitoring of present-day exposures, and an increase in non-unionized contract workers. The impact has been that miners have lost their solidarity and power to investigate, monitor or object to present-day exposures.<sup>66</sup>*

## Appendix A.

### **TSM Guiding Principles (2019)**

**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;
- Respecting the rights of our workers and not engaging in practices of forced or child labour, as defined in ILO Conventions 29,138 and 182;
- 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.

#### **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 Aboriginal peoples (First Nations, Inuit and Métis) 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.*

**Appendix B. List of full members of the Mining Association of Canada (2019)**

*[The asterix indicates companies that reported in 2018. Imperial Metals\* and Taseko Mines were also both members in 2017, the year of the report.]*

Agnico-Eagle\*  
Alexco Resources  
Arcelor Mines Canada \*  
B2Gold Corporation  
Baffinland\*  
Barrick Gold Corporation\*  
BHP Billiton Canada Inc  
Cameco Corp\*  
Canadian Natural Resources Ltd\*  
DeBeers Canada Inc\*  
Dominion Diamond Mines ULC\*  
Eldorado Gold  
Excellon Resources Inc\*  
First Quantum Minerals Ltd\*  
Fort Hills Limited Partnership  
Glencore Canada Corporation\*  
HD Mining International Ltd  
Hecla Quebec Inc  
Hudbay Minerals Inc\*  
Iamgold Corporation\*  
Iron Ore Company of Canada  
Kinross Gold Corporation  
Lundin Mining Corporation  
Mandalay Resources Corporation  
New Gold Inc \*  
Newmont Goldcorp \*  
Nexen Energy Ltd  
Noront Resources Ltd  
Nyrstar Canada (Holdings)\*  
Pan American Silver  
RioTinto Canada\*  
Royal Canadian Mint  
Sherritt International  
Star Diamond Corporation  
Stornoway Diamond Corporation  
Suncor Energy Inc\*  
Syncrude Canada Ltd\*  
Teck Resources Ltd\*  
Vale\*  
Western Copper and Gold  
Yamana Gold Inc

## Endnotes

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