EVOLVING STANDARDS AND EXPECTATIONS FOR RESPONSIBLE MINING, A CIVIL SOCIETY PERSPECTIVE

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ABSTRACT

MiningWatch Canada is the only national independent civil society organization with an exclusive focus on mining in Canada and Canadian mining companies operations internationally. In 2005, MiningWatch Canada collaborated with other NGOs to develop the Framework for Responsible Mining: A Guide to Evolving Standards. The project was the result of a perceived need by NGOs and retailers, particularly from the jewellery sector, for a framework that would set out environmental, social, and governance standards for the minerals sector "providing recommendations for retailers and others seeking to source or invest responsibly, as well as regulate and encourage responsible mining practices". This paper is a reflection on the Framework that examines key areas of concern and notes where the industry norms and expectations of civil society have evolved. The paper focuses on developments in social issues related to the UN Guiding Principles on Business and Human Rights, new initiatives associated with financial transparency, the UN Declaration on the Rights of Indigenous Peoples. The environmental components of the Framework that are revisited are waste management, biodiversity, energy and climate change, environmental assessment, mine closure, mercury and seabed mining.

KEYWORDS

Mining; Corporate Accountability; Standards; Certification; Environment; Governance; Human Rights, Indigenous Rights

INTRODUCTION

MiningWatch Canada is the only national independent civil society organization with an exclusive focus on mining in Canada and Canadian mining companies operations internationally. In 2005, Catherine Coumans of MiningWatch Canada collaborated with Marta Miranda (then of the World Wildlife Fund), and David Chambers of the Center for Science in Public Participation to develop the Framework for Responsible Mining: A Guide to Evolving Standards (the Framework) (Miranda et al, 2005). The Framework was the result of a perceived need by Non-Governmental Organizations (NGOs) and retailers, particularly from the jewellery sector, for a framework that would set out environmental, social, and governance standards for the minerals sector "providing recommendations for retailers and others seeking to source or invest responsibly, as well as regulate and encourage responsible mining practices" (Miranda et al, 2005). Seven principles inform the Framework's recommendations: sustainable development, equity, participatory decision making, accountability and transparency, precaution, efficiency, and polluter responsibility (the "polluter pays" principle).

The Framework characterizes responses to the issues it covers as the "Norm" defined as widely accepted practices and "Leading Edge" practices. Leading Edge practices for the purposes of the

Framework were defined as those that "could generate significant environmental and social improvements if implemented" (Miranda et al, 2005). The recommendations in the Framework were all based on Leading Edge practices of the time. While forward trending, in order to qualify as a recommendation, a Leading Edge standard or practice needed to already have received endorsement by at least three of the following four stakeholders: 1) governments and government agencies; 2) civil society groups, including NGOs; 3) the mining industry; and 4) financial institutions, including public and private banks as well as insurers (Miranda et al, 2005).

In its title the Framework clearly recognizes the rapidly evolving nature of "best practice" standards for the mining sector. Seven years later, the Framework provides an interesting reflection on that evolution as some standards that were Leading Edge in 2005, such as a commitment to reducing energy use and greenhouse gas emissions, have become the norm in 2012, while others, such as Free Prior and Informed Consent have received steadily increasing support, but remain contested in the industry sector, and unsupported in regulation by most governments. Perhaps most striking, particularly in the social realm, are the number of issues that have arisen as core areas of concern that were not at all or only faintly in view in 2005.

While the Framework set out standards the authors and reviewers believed to be essential norms for more responsible mining that could be adopted by regulators, implemented by companies, or required by investors, lenders, downstream consumers, communities, and civil society groups, it did not provide a mechanism by which compliance with these standards could be monitored or verified. One year after the Framework was completed a new initiative was launched in Vancouver, Canada, in June 2006 that was based on the Framework, as well as on other global norms such as the International Finance Corporations Performance Standards, the Global Reporting Initiative, and standards of the International Council of Mining and Metals. This effort, the Initiative for Responsible Mining Assurance (IRMA), has the participation of five sectors including mining companies, downstream metal purchasers (like jewellery retailers), environmental groups, affected communities and labour. IRMA seeks to develop the first assurance program for accountable mining that fully embraces a multi-stakeholder approach to developing credible standards, as well as a commitment to independently verified certification.

This paper does not provide a comprehensive update of the Framework, but rather it seeks to map out some issues that have emerged or undergone rapid evolution since 2005 and it provides a brief discussion of these issues, in particular: project level human rights due diligence; non-judicial grievance mechanisms; supply chain due diligence; revenue transparency; free prior and informed consent; waste management; biodiversity; energy use and greenhouse gas emissions; environmental assessment; mercury and seabed mining.

EVOLUTION OF SOCIAL STANDARDS

Within the mining realm, the first decade of the 21st century was characterized by an increasing focus on local and national –level social impacts by the industry, governments, civil society actors, lenders and investors. Between 2005 and 2012 this social focus gathered momentum and led to significant discussions about new norms. The impetus for these developments comes from many directions, most particularly from the agency of communities affected by mining. Local opposition, conflict and resistance to mining has increased numerically and in severity globally as has the awareness of these issues. Here we focus on three elements that crystallized emerging social issues: the work of the Special Representative of the Secretary General on the issue of human rights and transnational corporations (2005-2011); the passage of the Dodd-Frank financial reform act in the United States (2010); and the adoption by the UN General Assembly of the U.N. Declaration on the Rights of Indigenous Peoples (2007).

The UN Guiding Principles on Business and Human Rights

The same year the Framework for Responsible Mining was published a global process got underway that will have significant influence on the development of human rights standards related to mining for years to come. In 2005, UN Secretary General Kofi Annan named Professor John Ruggie as his Special Representative on business and human rights.

Ruggie set out to map patterns of alleged human rights abuses by businesses; evolving standards of international human rights law and international criminal law; emerging practices by States and companies; commentaries of Unites Nations treaty bodies on State obligations concerning business-related human rights abuse; the impact of investment agreements and corporate law and securities regulation on both States' and enterprises' human rights policies; and related subjects. (Ruggie, 2011 quoted in Coumans, 2012b)

In 2011, Ruggie published the "Guiding Principles on Business and Human Rights: Implementing the United Nations "Protect, Respect and Remedy" Framework" (Guiding Principles) which was unanimously endorsed by the UN Human Rights Council. Ruggie maintains that it is the duty of corporations to respect human rights, which he defines as "do no harm." It is hard to overestimate the significance of the UN entering the arena of norm setting for businesses. The rights-based standards rooted in the UN will now provide an alternative source of guidance and requirements next to the risk-based Performance Standards of the World Bank, which have become a globally recognized set of norms for mining companies.

While sector-specific guidance for implementation of the Guiding Principles has not yet been developed for the mining industry the following requirements, among others, will be of importance: demonstrated project-level human rights due diligence; the creation of rights-based project-level non-judicial grievance mechanisms; and evidence that materials sourced through a project's supply chain are produced in a way that is respectful of human rights (does no harm).

Human Rights Due Diligence

The Guiding Principles require that companies exercise human rights due diligence. For mining, that means that the potential project-level risks to human rights need to be evaluated and avoided or addressed in a transparent fashion at each stage of development from exploration through to closure. A tool that has emerged by which to assess potential human rights impacts on mining affected communities is the human rights impact assessment (HRIA). A number of different HRIA tools have been developed. Only one, that developed by the former International Centre for Human Rights and Democratic Development (Rights & Democracy) in Canada was explicitly a participatory instrument, which provided greater assurance that the community most likely to be impacted by a mine project was engaged in the assessment. As the process of carrying out a HRIA is likely to be invasive on a community it is important that the community give its consent to the process. Absent a consensual and participatory process, an HRIA may create further tensions, rather than help to resolve them. In cases of local opposition to a mine, for example, a HRIA can be viewed by the community as a tool that will be used by the company to undermine their agency (Coumans 2012a).

Non-Judicial Grievance Mechanism

One of the three pillars of the Guiding Principles is access to remedy for those who have been harmed by the operations of a corporation. The Guiding Principles highlight the need for access to justice both through judicial (courts) and non-judicial mechanisms. With respect to the latter, the Guiding Principles recommend that companies put in place project-level non-judicial grievance mechanisms. While such mechanisms may provide a means of finding resolutions to some problems, there are also potential dangers to local communities and individual community members who must avail of such

mechanisms, particularly in circumstances of community conflict with a mine. In these cases the mechanism can be used by the company to thwart local agency, particularly in jurisdictions without strong, independent and effective legal systems to which citizens can turn as an alternate to the use of a non-judicial mechanism (Coumans, 2012b). For project-level non-judicial grievance mechanisms to be an effective tool they should comply with mandatory standards, be subject to independent and transparent audits, and whatever remedy the company may offer must not be made conditional on the complainant signing away the right to seek justice through the courts. Finally, as project-level grievance mechanisms currently are not subject to these conditions, complainants should be free to avail themselves of non-judicial grievance mechanisms that are removed from the project level, such as National Contact Points of the OECD, without being first sent back to pursue remedy at the local level, as is currently required by Canada's CSR Counsellor.

Respecting Human Rights through Supply Chains

The need for corporations to take responsibility for the potential human rights impacts of companies in their supply chain is a new and significant challenge for many companies. *Shift* is an organization set up to help corporations and governments implement the Guiding Principles that has started holding workshops to "to explore challenges and generate practical guidance for companies regarding respect for human rights through global supply chains" (2012). *Shift* (2012) notes that

> The UN Guiding Principles state that companies may be involved with adverse human rights impacts either through their own activities or as a result of their business relationships. 'Business Relationships' are understood to include relationships with 'entities in [the company's] value chain.' As part of their corporate responsibility to respect human rights, companies are expected not only to avoid causing or contributing to adverse human rights impacts, but also to address 'human rights impacts that are directly linked to their operations, products or services by their business relationships, even if they have not contributed to those impacts.'

For mining companies, supply chain due diligence will be particularly challenging while operating in conflict zones or in jurisdictions with weak governance and weak enforcement of laws.

The Dodd-Frank Wall Street Reform and Consumer Protection Act

In 2010 the Dodd-Frank Wall Street Reform and Consumer Protection Act (Dodd-Frank) was passed in the United States and in 2012 the implementing rules related to the act were passed. Section 1504 of Dodd-Frank requires oil, gas and mining companies listed on US stock exchanges to disclose their payments to governments. Companies are required to disclose the type and total amount of such payments made for each project and the type and total amount of payments made to each government. In addition, Section 13(q) requires these resource extraction companies to provide information regarding those payments in an interactive data format. While Dodd Frank only applies to US stock exchanges it will impact foreign-based companies listed on US exchanges and it will provide information on payments to governments all over the world. It is likely that the European Union will soon follow suit with similar requirements.

Revenue Transparency and Development

As mining companies increasingly face local level opposition and have come under critical public scrutiny for the environmental and social harm with which they are associated, the industry has responded by a vigorous international campaign re-branding itself as a vehicle for development. This in spite of a growing literature that demonstrates that mining frequently negatively impacts both short and long term

local level development, as well as national development, in resource dependent countries with weak governance. At the same time major international mining companies and the international industry lobby frequently oppose efforts by developing country governments to increase the revenues they receive from mining – even during boom times. Additionally, investor-state contracts – most of which are confidential – frequently contain provisions, such as transfer pricing, that result in losses of revenue from taxes for developing country governments. These funds are commonly siphoned off to off-shore tax havens such as the Cayman Islands. If the mining industry wants to be seen as a development actor it needs to move beyond Corporate Social Responsibility (CSR) projects – sometimes paid for by home state taxpayers through official development assistance – and assure that it pays its fair share of taxes and royalties to host state governments who can then apply these to national development. Section 1504 of Dodd-Frank will require revenue transparency regarding payments made to governments that will allow civil society, law makers and others assess the adequacy of these payments.

Mining companies and mining industry lobby groups such as the International Council on Minerals and Metals (ICMM) should lobby for the passage of Dodd-Frank-type legislation in other jurisdictions with stock exchanges that are home to many of the world's mining companies, such as Canada. This revenue transparency will help combat corruption and will provide greater transparency regarding the benefits mining provides through payments to governments. Additionally, the industry should move to stop the usage of accounting mechanisms such as transfer pricing to avoid paying taxes.

The UN Declaration on the Rights of Indigenous Peoples

The U.N. Declaration on the Rights of Indigenous Peoples (UNDRIP) (2007) sets out various rights of indigenous peoples that are relevant to mining including: rights to property, culture, religion, and non-discrimination in relation to lands, territories and natural resources, including sacred places and objects; rights to health and physical well-being in relation to a clean and healthy environment; rights to set and pursue their own priorities for development, including development of natural resources and broader territorial management issues, as part of their fundamental right to self-determination; participatory rights, including the right to make authoritative decisions about external projects or investments (IRMA, no date)

One of the ways these rights are safeguarded is through the requirement to obtain the free, prior and informed consent (FPIC) of indigenous peoples in cases where development projects may affect them.

Free Prior and Informed Consent

The UNDRIP was negotiated over a period of 20 years. The concept of FPIC has long been understood as a key requirement of indigenous peoples. A standard on FPIC was prominent in the Framework for Responsible Mining, which also provided appendixes that lay out the legal case for FPIC and examples of early adoption of the principle in some jurisdictions. However, industry and government resistance to adoption of this standard has remained strong. ICMM has resisted supporting the principle as have home state governments of mining companies, such as Canada. Nonetheless, the principle is gaining acceptance and making inroads, even into financial institutions such as the European Bank for Reconstruction and Development and mainstream risk-based standards such as the IFC Performance Standards which adopted FPIC in its latest revision (although the scope of the principle is somewhat restricted in the Guidance Document). A number of mining companies have made statements in support of FPIC (Voss et al 2012) including Inmet, Newmont, Rio Tinto, and Xstrata though documentation of implementation is scant. Unfortunately some in industry, including the ICMM are actively trying to re-interpret FPIC with efforts to portray the meaning as enhanced consultation rather than true consent with the ability to withhold consent, i.e. to say "no" to a mine.

While mining companies recognize the costs of conflict and often speak about their need to have a "social licence to operate" they largely continue to oppose a principle that entails the right of indigenous peoples to say no to a project they consider harmful to their current and future well being.

EVOLUTION OF ENVIRONMENTAL STANDARDS

The Framework provides guidance for the following areas of concern related to environmental protection: Exploration, Environmental Impact Analysis, Water Contamination and Use, Acid Mine (Rock) Drainage, Air, Energy Consumption, Noise, Waste Management, Cyanide, Reclamation, Financial Guarantees, Post Closure, and Monitoring and Oversight. In the following sections we will provide brief updates on waste management, biodiversity, energy use and greenhouse gas emissions, and environmental assessment. Other areas of the framework, notably closure, remediation and post closure have seen little evolution in industry performance or civil society expectations since the Framework was first completed. Mercury and sea-bed mining are two areas of emerging concern for civil society that are also discussed.

Waste Management

In its Waste Management section the Framework indicates that riverine tailings disposal and shallow sub-marine disposal do not reflect responsible practices and that deeper submarine disposal should be approached with great caution. In Canada and the US, another issue related to mine waste management that has come to the fore in recent years - the use of lakes, wetlands and stream valleys for mine waste disposal. These natural depressions make convenient basins for waste disposal and considerably reduce the cost of tailings impoundment construction. Because the natural basins may be more geologically stable than constructed impoundments it's been argued they are an environmentally sound choice (MAC, 2008). We have summarized the issues surrounding the practice in Canada elsewhere (Hart, 2011) and an international perspective was included in a joint report by Earthworks and MiningWatch (2012) *Troubled Waters*. At the policy level both industry and Canadian and US governments have continued to defend the practice, but at a project level we have seen an increasing hesitance to destroy natural water bodies. In large part this hesitance could be attributed to the public backlash over earlier proposals and the failure of two projects in British Columbia (Kemess North and Prosperity) to obtain necessary approvals.

We are encouraged by this more cautious approach but remain concerned that economic factors trump other considerations in decisions over use of natural water bodies as repositories for mining waste. We have also identified significant information gaps in our understanding about the long-term biological implications about the practice that dispute assurances from industry that lakes will recover post-disposal (Gendron & Hart, 2012).

The current practice for waste disposal in the majority of mining projects is construction of a tailings impoundment and maintenance of a water cover over potentially acid generating tailings. Proper construction of impoundments is a focus of the waste management section of the Framework and of much of government and industry work within the mining and environment nexus. While effective at minimizing acid mine drainage, long-term maintenance of such facilities remains a serious concern. Options with lower risks of failure such as paste and thickened tailings exist, yet their application has been limited. Over the lifecycle of a mine such options may in fact prove more economical despite higher upfront costs (Reid et al., 2008) but it seems these upfront costs are deemed too much of a burden. None of the projects we have reviewed in recent years have given serious consideration to such alternatives or conducted lifecycle cost assessments including the post-closure period.

Biodiversity

Within the Framework biodiversity is addressed as an issue of where to or not to mine, and it recommends avoiding areas of high conservation value and designated protected areas. Since the drafting of the Framework a considerable amount of industry effort has gone into the theme of biodiversity and mining. The Mining Association of Canada's Towards Sustainable Mining program is about to introduce biodiversity reporting requirements and the ICMM has developed a guidance document and published case studies on biodiversity management. The emphasis in these efforts has, however, been on addressing site level impacts and identifying methods of "offsetting" site-specific impacts. Indeed if a Google search is any indication the mining industry would seem to be a leader in the offsetting approach as many of the hits for a search of "biodiversity offsets" related to the mining sector and many of the examples cited in general documents were from the sector. Though embraced by the industry, offsets remain a controversial approach (for example see Monbiot 2012, Maron et al 2012) and should only be used after all other efforts to avoid impacts are considered. A full review of biodiversity offsets in the mining sector is beyond the scope of this paper but would be a worthwhile project to undertake.

In contrast to work on offsets, there has been relatively little movement from industry or many governments in addressing the appropriateness of mining in sensitive ecosystems. Examples of current controversies over the appropriateness of mining in high conservation value ecosystems include: various exploration projects in the Peel Watershed (Yukon), exploration in the largest remaining old-growth red pine stand in North America (Ontario), mine development in Grass River Provincial Park (Manitoba), the Pebble Mine in the headwaters of Bristol Bay (Alaska), Cobre Panama project in the Meso-American Biodiversity Corridor (Panama) and exploration and mine development in alpine "páramos" of the Andes (Colombia and Ecuador).

Energy Use and Climate Change

A leading edge approach identified by the Framework is the development of energy and greenhouse gas reduction programs. This has become the norm for major companies that subscribe to the GRI and frameworks like TSM. While reporting has increased, success at actually reducing emissions has proven more challenging. There was no improvement in GHG intensity at Canadian mines from 1998 to 2008, though important improvements were made in the refining and fabrication sectors (NRCan, 2010). Reported energy intensities for Barrick Gold (2012), Inmet (2012) and Teck (2012) indicate a general trend of increasing emissions with some modest gains made in 2011. The trend of accessing increasingly lower grade deposits in remote areas that depend on diesel generators and require long-distance transport is likely to make future energy efficiency gains a significant challenge.

Given the potential inherent challenges in reducing greenhouse gas emissions from mine sites the industry may turn to climate offsets to reduce their net carbon footprint (as indicated by the considerable uptake of biodiversity offsets). Carbon offsets have, however, shown to be a problematic response to civil society's demands for reducing emissions. The Indigenous Environment Network, for example, opposes the use of offsets and points to the negative impacts that offsetting programs such as REDD (Reducing Emissions from Deforestation and Degradation) have had on the Indigenous peoples and their territories (IEN 2012). MiningWatch shares many of IEN's concerns about greenhouse gas offset programs.

Environmental Assessment

In 2005, when the Framework was written there was broad acknowledgement of the importance of environmental assessment (EA) but considerable differences in how EA should be applied in practice.

The Framework notes a less rigorous approach in Canada compared to the USA, and unfortunately recent changes to the federal Environmental Assessment Act and the discretionary policies related to EA have further restricted our federal EA processes (Ecojustice, 2012). There has also been a significant drop in the funds made available for Aboriginal and stakeholder participation. Provincial and territorial processes are in place across Canada however they are inconsistent in their approaches and share many of the limitations of the new federal regime in that broader questions of sustainability, equity, need for proposed projects, and life cycle analyses are weak or lacking.

Participation of Aboriginal peoples in the EA process remains an important concern, especially in southern Canada where there are few modern agreements with the provincial governments to share responsibilities for resource management. A case in point is the EA process for the so-called "Ring of Fire" mineral deposits in northern Ontario. Lack of consideration of Aboriginal peoples concerns and recommendations has resulted in a court case by Matawa Council on behalf of several first nations. Ontario is also the only jurisdiction in Canada where a provincial EA is not required for mines. It is only engaged by Ministerial order or on a voluntary basis.

Most of the leading edge issues in the Framework are very much still in need of improvement across the sector. One aspect that may see some improvement in the near future is the accountability for EA commitments. A positive change to federal legislation enables the government to make binding legal requirements through the EA process. Of course these will be applied to narrow areas of federal jurisdiction and monitoring and enforcement commitments will be needed for this new opportunity to meet its limited potential.

Environmental Assessment and Climate Change

Climate change considerations have become an important component in environmental assessments as climate change introduces significant risks and uncertainties to mining operations and infrastructure (DSF 2009). Under the old Canadian Environmental Assessment regime it was required to consider impacts of climate change on the design and operation of a proposed project. In practice this requirement was met with a considerable degree of variability but leading companies have been considering increased variability and incorporating climate changes predictions into their water balances and facilities designs.

Under federal EA it was also standard practice to provide estimates of greenhouse gas emissions for proposed projects in environmental assessments. It is not clear if this will be included under interpretations of the new act, though recently released draft EIS guidelines suggest not (CEAA 2013). In the past there has been an inadequate treatment of this issue in most of the EAs we have reviewed. Emissions from a proposed project are often compared to total regional and national carbon budgets, which make the project's emissions appear insignificant. A more effective approach to assessing individual projects would be to provide predictions in intensity units, compared with other mining operations, recycling and other industrial activities. This would provide a much more robust assessment of the projects relative contribution to global climate change.

According to a recent report from Australia (Campbell and Grudnoff 2013), the climate impacts of coal mining are often not adequately addressed in project assessments. The authors found that project assessments assumed mining coal in a particular location would not increase the overall consumption of coal or release of green house gases and they provide a critique of this assumption. It would be interesting to assess how wide-spread this assumption is outside of Australia.

Mercury

The international community has done a considerable amount of work in recent years towards reducing mercury releases to the environment and at the beginning of 2013, the UN treaty on mercury was finalized to mixed reviews . The Framework does not specifically address mercury even though it is widely recognized that mining and mineral processing are important sources of mercury pollution. While much of the recent concern has been focussed on artisanal mining, large scale mining and mineral processing can also be significant sources of mercury releases. While it was in operation (to 2009), HudBay's Flin Flon smelter was the largest source of mercury releases in Canada (NPRI n.d.). National Pollutant Release Inventory data from 2011 indicate total releases of mercury from mining in Canada at 438 kg, an increase of over 100% of the annual 2007-2010 releases despite the shut down of the Flin Flon smelter. This amount does not include the mercury that is disposed of on-site some of which could escape in the future.

The ICMM (2009) has a position paper on mercury that requires members to monitor and report mercury releases and minimize emissions through "the application of cost effective best available technology, using a risk based approach". It is unfortunate that the commitment is couched in terms that would excuse a lack of action to reduce emissions. The data above show that more efforts need to go into reducing mercury emissions from large scale mining as well as ongoing work for small scale operations. Future efforts to develop standards for mining should reflect the commitments of the Mercury Treaty and go beyond these to ensure real reduction in emissions.

Sea-bed Mining

Though by no means new, sea-bed mining has gained a heightened degree interest and concern since the Framework was drafted. A Canadian company is at the fore of efforts to expand the frontier of mining into the deep sea and has run up against environmental and political challenges. Sea-bed mining, and in particular deep-sea mining brings along with it a series of unique and substantial challenges to responsible development. One of the most significant challenges is the lack of understanding about the deep-sea environment and on the potential impacts of mining and waste disposal at sea (Rosenbaum 2011). Another significant challenge is the lack of legal framework for international waters and within national boundaries. (Rosenbaum 2011) Community groups and NGOs have been clear that mining should not proceed until these issues are addressed. A guidance document has been created for south Pacific Nations to assist them with developing necessary legal framework but it has not been well received by civil society (Island Business 2012 & SPC 2012).

CONCLUSION

It is clear from our retrospective look at the Framework and the evolution of practices and expectations that improvements have been made in some areas of concern and that there is an increasing degree of expectations on corporations from civil society. Reporting on environmental and social issues has greatly improved and will improve further with binding requirements such as those of the Dodd Frank legislation in the US. There has, however been some disturbing trends in the Canadian legal framework with decreasing federal role in environmental assessment. We are also aware of several attacks on laws in the USA that currently restrict mining's impact on the environment or require the industry to meet rigorous standards.

It is also important to distinguish between the improvements in standards and norms and real improvements in performance. The same can be said for improvements in reporting and transparency versus improvements in minimizing negative impacts (e.g. greenhouse gas emissions) and maximising benefits (e.g. tax payments). Though hard to quantify we do not see any real indication that the number of on-the ground social conflicts are decreasing, suggesting that performance of the sector still has a long-

way to improve. Associated with these conflicts we have observed a disturbing increase in the criminalization of those who oppose mining projects for a variety of legitimate reasons.

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