

Kim Hudson
kimhdsn@gmail.com
Whitehorse, Yukon

Emily Martin Consulting
emilymwmartin@gmail.com
Whitehorse, Yukon

August 31, 2020

To the Yukon Mineral Development Strategy,

Enclosed please find our submission to the Yukon Mineral Development Strategy panel. Kim Hudson and Emily Martin are Whitehorse based consultants specializing in governance, dialogue, and socio-economics related to mineral development in the Yukon. Kim's experience includes work as an exploration geologist, prospector, First Nation advisor, Federal Land Claims negotiator, member of Yukon Water Board and Chair of the Yukon Land Use Planning Council. Emily's experience includes work as an academic on First Nations consultation related to mining in the Yukon, the Mineral Consultation Advisor to the Mineral Resources Branch of Yukon Government, and now does consulting primarily for Yukon First Nations and Yukon Government clients related to lands and resources governance.

This commentary is provided in support of the Yukon government's initiative to produce a Mineral Development Strategy (MDS). An MDS is an important instrument for understanding the fundamental drivers of mining-related decision making. These drivers color the implementation of the entire regulatory regime, ensure the best use of available resources, and identify gaps in the overall vision for mineral development.

In this submission, we have identified three areas which we feel are integral to the success of the Yukon Mineral Development Strategy: Yukon and First Nation governments co-identification of values, careful consideration of sustainability and innovation, and a recognition of the limitations of regulation and the benefits of creation of appropriate venues for dialogue.

Thank you for considering this submission,

Kim Hudson and Emily Martin

Yukon Mineral Development Strategy: Hudson-Martin Submission

August 31, 2020

A strategy provides a roadmap for achieving a clearly defined set of goals. A successful strategy therefore needs, at its core, goals that reflect meaningful values. As coaches love to say, “practice makes you perfect at what you practice”. A crucial step in establishing good practice in the Yukon with respect to mineral development is clear and broadly supported articulation of what is valued. We commend Yukon Government for taking the initiative to establish a Mineral Development Strategy and the opportunity it presents to deeply consider and clearly describe the driving values behind having a healthy mineral industry in the Yukon.

Co-Identification of Values

An MDS ideally provides a clear path that guides decision making related to the mineral industry. It enables regulators to effectively respond to industry and rights holders and gives citizens transparent information on their government’s values and goals. It also gives industry crucial information on the landscape they plan to work in allowing them to optimize their path to success.

The first and most significant question is “What do we value as Yukoners, and how do we see the mineral industry contributing to that?” Historically, the values expressed in northern Canadian mineral development strategies are economic prosperity through the promotion and support of the mineral industry, and maximization of resident employment and business opportunities. A proud identity as a mining community and a commitment to sustainability of the mineral industry are also cited as values behind other mineral development strategies.

As a result of the negotiation of Comprehensive Yukon Land Claim Agreements, the Yukon has a unique mineral exploration and development governance structure that empowers First Nation and Territorial governments at various levels. For the values expressed by the Mineral Development Strategy to be meaningful and efficient, they must be the result of a co-creation between Yukon First Nations and Territorial governments. A clear statement of how the governments see their working relationships, and their shared and unique values as they relate to mineral development, is also vital to achieving a vibrant Yukon mineral industry. Even if there are regional differences, clear statements of these differences will greatly support the Yukon mineral industry.

Globally, other jurisdictions have emphasized the importance of innovation to ensure environmental protection and reduced carbon footprint (Scotland and Australia), and development of strong governance (see Africa Mining Vision, www.africanminingvision.org, with its transparent, equitable and optimal exploitation; participatory processes; shared

benefits, and accountability pillars for mineral development). Optimizing regulatory regimes, articulation of clear intergovernmental roles, supporting collaborations, and building capacity are also mentioned as values that drive a mineral strategy. The World Bank's paper on *The Growing Role of Minerals and Metals for a Low Carbon Future* (2017) emphasizes inclusivity and diversity as important values of the modern mineral industry at all stages. Indeed, there are a rich array of values that can drive an MDS, and each region selects its unique vision based on its governance model, history, culture, and landscape.

A collaborative process to identify values also avoids making statements that create division rather than express shared values. The history of Yukon mineral exploration and mining includes examples of incredible human grit, ingenuity and hard work. For many Indigenous Nations, however, the mining history of the Yukon is not a positive defining moment. It was a time of developing mistrust and racism, including disrespect for traditional governance and economies. Further aggravating these relationships is the perspective that 'the land is here for our use'. This led to the environmental legacy of the Faro Mine, a global cautionary tale. This diversity of experiences with mining needs to be honored.

Collaborative identification by First Nations and Territorial governments', of the values that drive the mineral management regime, could play a significant role in supporting other processes as well. Taking the time to articulate the underlying values that drive mineral development decisions in the Yukon will reveal hidden assumptions and make space for clarity and transparency. This initiative to co-identify values would be a vital step for supporting a successful Land Use Planning process, and amendments to the Quartz and Placer Mining Acts.

Sustainability

Most mineral development strategies reference the value of sustainability. The word sustainable is an adverb, which makes it very important to pay attention to the word that follows. It says what we hope to sustain. The meaning of sustainability, as it pertains to the mineral industry, has been evolving over the past thirty years. Up to the late 1980s, sustainable mining generally referred to efforts to support the longevity of the mineral industry. With the acceptance of the Brundtland report, Sustainable Development expanded to include efforts to limit damage to the environment as an acceptable cost of mining. With the advent of robotization since 2018, and with an interest in gaining social licence to mine, several major mineral companies have come to define sustainability as the duty to leave a legacy of good long after the mine has closed. These companies have used their buying power to support local economies, their technical abilities to advance local industries unrelated to mining, and given consideration to local needs when building transportation routes and mining infrastructure (such as mills designed to be repurposed to support a community priority at the end of mine life).

Our understanding of sustainability greatly impacts the mineral development strategy. When sustainability is equivalent to ensuring longevity to the mineral industry, the goal becomes to support new discoveries through land availability, strong geologic research, and industry

incentives. Streamlined regulatory regimes are valued for their ability to ensure timely progress when the goal is a sustainable industry.

When sustainability refers to protection of the environment, there is an understanding that projects that do irrevocable harm to the environment will be denied. Regulatory processes pride themselves in inclusion of diverse perspectives, and incorporation of state-of-the-art environmental science.

If sustainability means there is a lasting benefit beyond mine life, there needs to be meaningful discussion from project inception as to the values and interests of the local and regional communities, and how the industry can support and avoid frustrating those interests. From there, all parties commit to stay engaged, share their resources, and look for opportunities to collaborate.

Sustainability could refer to sustainable mining, sustainable environmental practices, sustainable employment, and sustainable positive impacts from the mineral industry. They can co-exist, but they can also be in conflict. This complexity needs to be recognized and addressed explicitly. Once again, we see the importance of having a Mineral Development Strategy to do this work.

Innovation

A modern MDS needs to be responsive to the rapid changes currently taking place in the mineral development landscape. The mineral industry is looking to incorporate new technologies like robotization, self-charging batteries, and regional collaborations. These advances are presenting significant potential for cost savings, and substantially lower environmental impacts and carbon footprints. All these innovations support sustainable mining and sustainable environmental practices. They do not, however, all support sustainable jobs.

For example, Glencore's Onaping Depth Project 20122, which sits 2.6 km deep in the Sudbury camp, was previously prohibitive due to the human dangers of deep underground mining (creating open space in rocks under high pressure, 52°C host rocks and, challenges of pumping air to depth). These problems are all overcome, and the deposit becomes economically viable, with the incorporation of robot technology. Suddenly, a fraction of the employees are required to operate the mine, resulting in significantly less expenses from travel, food, accommodation, and management. Productivity increases because the mine does not have to be cleared for blasting rounds when there are no humans, and one piece of equipment can be designed to do several jobs. No humans also means smaller access tunnels because there is no need for ventilation, temperature modulation or headroom.

In addition, when new battery powered vehicles are employed, there is a cascade of positive effects. Far less transportation of fuel, no need to ventilate for diesel fuel operation which results in savings from ability to build smaller underground tunnels. The benefits to the environment, carbon footprint and cost reductions are so great that major companies are seeing the Clean Mining movement as the way of the future.

The Yukon MDS is an opportunity to incorporate a vision for the future that includes clear statements of the attitudes towards innovation. The MDS could include support for innovations such as favourable attitudes towards small scale approaches when an iterative development process would be beneficial, and the ability to waive terms and conditions in cases where they become irrelevant. For example, regulations in Ontario assume diesel use and regulators struggle to find a mechanism for waving diesel related requirements. This threatens the huge cost savings advantage and environmental benefits of using self-charging electrical batteries.

The nature of regulations is to set predefined limits based on known outcomes. Innovations often have unknown outcomes which is very challenging for regulators. An MDS can make statements of the vision for incorporation of innovations that guide licencing and regulating bodies as they work to be responsive to the modernization trend of the global mineral industry.

A Role for Multi-Party Dialogue

The regulatory process is a key touch point for First Nations rights holders regarding mineral development in their traditional territories. First Nations' governments work hard to submit comments to regulators raising project specific issues, but also larger intimately connected concerns (ex. cumulative impacts, the consultation process, loss of culture, sense of place etc.). The regulator, unable to address many of these concerns with the tools and knowledge they have, sets these issues aside. Rarely do these issues find appropriate venues for resolution, if those venues exist at all. Understandably, First Nations' staff are frustrated by this dead-end pattern and trust in the process declines.

This negative cycle could be resolved by an MDS that recognizes this fundamental flaw in the system. The Yukon regulatory regime may be well designed for its specific function, namely setting limits for project-specific activity and delivering consequences for exceeding them. The real challenges with the current system are that it is asking regulators to also do tasks that they have no ability to achieve with the tools before them. Regulators can only mitigate impacts but cannot engage in big picture conversations, support shared benefits or foster innovation. Relationship building, consideration of cumulative impacts, meaningful engagement, discovery of mutual benefits and interests, and exploration of innovative potential all need an interactive, long-term, and uniquely structured forum.

Inclusivity is a concept that is becoming integral to the mineral industry. The secret to success in many regions has been the introduction of a multi-party process for dialogue. This forum provides a venue for sharing of diverse perspectives, meaningful two-way conversation, for the discovery of mutual benefits and interactive solutions. These discussions are designed to begin at the inception of a project and continue throughout the mining life cycle.

This dialogue can be between a diversity of parties, depending on the needs at the time. Parties could include mineral company, Indigenous rights holders, local community, Crown government actors, or other regional interest groups. Anglo American introduced a Dialogue Table for

community members and businesses as part of their 2010 Peru Project. The Table allowed them to redesign and optimize the project in response to local input. They believed it created a better project as well as community support. An Anglo American executive noted how hard it would be to regulate this process “so don’t try”.

A dialogue forum can bring together two mineral companies. In the Atacama Desert of Chile, Teck’s *El Morro* and Goldcorp’s *Relincho* properties represented two of the most promising copper-molybdenum-gold porphyry targets in the Americas. However, neither deposit was economic, despite each company spending over \$600 million dollars to define it. The two companies decided to rethink their competitive advantage model and instead meet to explore the possibilities of mutual benefits. Once they were able to shift their mindset, the creativity and benefits were enormous. They took a more regional approach and looked at developing the two mines as one. The reduction in carbon footprint, environmental impact, and costs was impressive to say the least. These features along with a longer mine life plan due to staged development also gained social licence to operate and more financing options. The dual project was renamed the *Nueva Union* and became an economic mine.

At the Prospectors and Developers Association of Canada 2016 conference, Brent Bergeron, Goldcorp’s then executive vice president of executive affairs and sustainability shared a similar message about the limits of regulation. He talked about his experience as part of the negotiation team that concluded the highly respected Collaboration Agreement with the Cree Nation on the *Éléonore* gold mine in Quebec, Canada. He is often asked if the agreement meets the UN standard of “free, prior, and informed consent?” by companies looking for a formula for future negotiations.

Bergeron responds by saying, “I don’t know. I don’t even care. I think the principle of free, prior and informed consent is important, but I will not go into a community thinking I have to tick off that box. What builds a mine is relationships. It is an ongoing commitment to being open and transparent – like a marriage. We want [the relationship] to be so strong that it can withstand the hard times – and we do have them.” He went on to acknowledge that seeking this kind of connection with local communities is a more vulnerable position for the company to place themselves in than focusing solely on meeting regulatory requirements, but it has so many advantages. As the saying goes, if you want to go fast, go alone. If you want to go better, go together.

Interactive discussion, on a project and regional basis, has the ability to address areas that are beyond the scope of regulatory bodies. The Devonshire Initiative is a good example of how to establish a collaborative multi-stakeholder forum on mining. It began in 2010 as an organization to support and develop dialogue processes for cross-sector collaboration, with the goal of improving outcomes in the mining context. Through their 10 years of work, the Devonshire Initiative has had success and offers valuable lessons to others interested in multi-party dialogue.

The Yukon Mineral Development Strategy has the opportunity to make clear statements of support for good dialogue between companies, rights holders, communities and governments throughout the mining cycle. This could be the missing ingredient for efficient regulatory systems as well. Support for collaboration agreements, dedicated dialogue tables, and other methods of inclusion of diverse views has the potential to create a healthier mineral industry for everyone.

Recommendations

In keeping with the above submission, we recommend the following to the Yukon Mineral Development Strategy:

- Collaboratively with Yukon First Nations clearly state the values that will direct mineral development in the Yukon. The MDS could assume the value of economic prosperity is universal and explicit but it misses the opportunity to go deeper and discovered the range of values all the governments in the Yukon wish to see fulfilled through mineral development.
- Recognize the various understandings of 'sustainability' and how each can be supported through the MDS. Be explicit about which understanding is being used when.
- Clearly state attitudes towards technological innovation, with a recognition that innovative mining trends (including robotization and self-charging batteries) are transforming the local job potential of mineral development.
- Support the creation of venues for multi-party dialogues to foster relationships, innovative solutions, consideration of cumulative impacts, mutual benefits and a positive future for the Yukon.