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RE: Critical Minerals Framework Discussion Paper (ERO 019-3281)

Dear Mr. Head-Petersen,

Thank you for the opportunity to provide comments on the Ontario Ministry of Energy, Northern Development and Mines (MENDM) Critical Minerals Framework Discussion Paper (*ERO No. 019-3281*).

We are submitting this feedback in our capacities as Wildlife Conservation Society (WCS) Canada scientists conducting research on species, ecosystems, land use and climate change to inform conservation and management decision-making. WCS Canada is a national non-government organization that has been engaged in Ontario since 2004, with research and conservation priorities in Ontario largely focused on the far north. We are some of the few scientists with a continuous presence in the region. We lead ongoing scientific programs, support and collaborate with First Nations on community-based research and monitoring projects, and collaborate with academic and government researchers on ecological studies in the region. WCS Canada has a long-term and consistent engagement with the government on relevant policy and legislation in the far north in Ontario, including species at risk, land use planning, mineral exploration permits, and impact assessment, particularly in the Ring of Fire. WCS Canada scientists have provided expert testimony on the potential direct and cumulative impacts of mining and mineral exploration on fish, wildlife, and ecosystems on behalf of Matawa First Nations (Cliffs Chromite Project, CEA Agency in 2016) and Kitchenuhmaykoosib Inninuwug (Ontario, Platinex Inc. in 2006).

This document is timely, but falls short as a well-coordinated strategy necessary for sustainable mineral development. The strategy should include plans for policies based on a scientific understanding of the anticipated long-term demand and supply of all minerals as well as the associated social and ecological implications of their extraction and production. The current framework is largely a repackaging of Ontario's previous mineral development strategies and represents a *status quo* approach to mining minerals and metals, including ones now considered to be critical based on current provincial and federal criteria. The framework fails to acknowledge the many potential impacts of mineral extraction on the biophysical, social, and economic systems in the transition to low-carbon economies. It assumes that the impacts and risks will be addressed through existing provincial policies and regulations (particularly impact assessment) that if anything, that have been weakened in recent years.

Here, we address selected discussion questions Ontario has posed in the document for the objectives and four of the five areas of focus to elaborate on our concerns:

I. Objectives for developing Ontario's critical minerals strategy

1. Will these objectives support achieving Ontario's vision?

The objectives for the Critical Mineral Strategy are incomplete. The current Framework Discussion Paper provides a high level overview of some of the issues, but falls short in creating a comprehensive strategy. Objectives should support Ontario's decision-making about the potential risks and impacts of mineral resource extraction and land use in a strategic and regional way.

Although there are several references to the sustainability of mineral resource development throughout the document (particularly in the opening pages), the objectives and areas of focus in this strategy are entirely devoted to encouraging development, with little or no attention to addressing social, ecological, and economic risks. This, in spite of some attention to Environmental, Social, and Governance (ESG) pressures and investment trends in the opening pages. These critical issues are never mentioned again in the body of the strategy.

The objectives fail to acknowledge the complexities of source risks and land disturbance from mining in Ontario. These would include: waste and waste containment, water use - especially given most First Nations communities in Ontario lack access to clean drinking water, conservation values, including key biodiversity areas and food sovereignty for First Nations, other land uses and livelihood impacts, impacts to remote First Nation communities upstream and downstream of the activities, social vulnerabilities of First Nation communities, and governance issues, particularly jurisdiction and the demand by First Nations for active roles in decision making about mineral exploration and mining projects on the land, air, water, wildlife, and human health.

2. Are there any other elements that need to be considered in the objectives?

The following elements are missing from the objectives:

1) *Environmental, Social, and Governance risks.* The anticipated demand for minerals necessary for low-carbon energy technologies will require significant new land use, including mineral exploration, and resource extraction, including of iron and copper. Extractive activities like mining affect ecosystems and the services they provide both directly, indirectly and cumulatively in space and time. These legacy impacts extend beyond the mine footprint and beyond the mine's productive life. The current proposal must consider the ecological, social, and economic risks associated with Ontario's vision for increased mineral extraction and the trade-offs that will be required to meet Ontario's vision, particularly in the far north.

2) *Explicit attention to development of the Ring of Fire.* The Ring of Fire requires particular attention as a mineral region associated with a number of ESG risks. Its development will require large, linear all-season roads capable of handling industrial ore transportation in order for anticipated mineral exploration and mining operations to be viable. Currently, impacts to terrestrial and freshwater systems and First Nations communities and rights, particularly downstream, are not adequately considered in local study areas described in current road proposals for the Marten Fall Community Access Road Project and the Webequie Supply Road. In order to support mining and region-opening development,

the road proposals are occurring in some of the most intact and ecologically and culturally sensitive regions in the Ontario, Canada and the world.

3) *Critical minerals in the circular economy.* Enabling supplies of critical minerals to support a low-carbon economy in response to climate change impacts is not just about finding and developing new mineral deposits. Maintaining a stable metal supply also means promoting reuse or recycling of critical metals to also improve the future availability of those metals. These include strategies such as the 3R concept, the circular economy, and other material efficiencies. The circular economy, for example, is where products manufactured from raw materials are repaired, reused, returned and recycled, instead of disposed in landfills. For the mining industry, that includes further reducing raw materials in the mining process, reusing resources such as freshwater and waste, and recycling water and metal products.

3. What are some actions Ontario could consider to achieve these objectives?

Any mineral development strategy must explicitly consider the ecological, social, and economic risks associated with Ontario's vision and the trade-offs required to meet Ontario's vision, particularly in the far north. Ontario must carefully consider how to manage the ecological, social, and economic risks of mining, including for critical minerals, in a low-carbon future.

Ontario should assess ESG risks across Ontario and develop strategies for ESG risk "hotspots" like the Ring of Fire. Global analyses suggest mining affects regions unevenly. The experience in Ontario confirms that First Nations and local communities as well as ecosystems are impacted different depending on where the projects are located. We anticipate that mining in the far north of Ontario will have higher risk complexities given the remote and intact nature of these systems. The carbon-rich peatlands and extensive undammed and unregulated freshwater systems are globally significant. If developed without proper attention to safeguarding their sink function, the resulting emissions will exacerbate climate risks. We have provided recommendations in previous submissions regarding the protection of these systems that also make up the homelands of First Nation communities with constitutionally-protected rights. We also anticipate that mining new minerals such as chromite, with which Ontario has no experience, further increases the ESG risks associated with developing the Ring of Fire. The framework should be revised to consider the Ring of Fire and other hotspots more explicitly.

Ontario should conduct transparent analyses of the trade-offs and synergies around the source of energy transition metals and provide more transparency in reporting on subsidies and taxation regimes across the mining sector. It is likely that the trade-offs and synergies of energy transition metals and the supporting sectors required for a low-carbon economy will be based on the commodity and the location. Analyses of the list of minerals could allow Ontario, as well as investors, to address risk in energy transition metal exploration and mining and highlight areas where there are a large number of existing mining projects or growth-inducing regional development such as the Ring of Fire. The framework should consider how these trade-offs will be made with other land uses (e.g., protection) and sectors (e.g., forestry, infrastructure) given Ontario's limited policy and direction on integrated resource management.

II. Area of Focus: Supporting partnership opportunities with Indigenous communities

Regarding assurances in the document that “the responsible development of natural resources will continue to build stronger, healthier, and more prosperous communities across Ontario”, there is no indication of what qualifies as “responsible development”. This deserves more explicit consideration.

While resource development could certainly provide significant potential opportunities for employment and economic development, it is clear from experiences all over Canada that the environmental and social burdens of resource development have historically affected Indigenous communities most significantly and often negatively. First Nations in northern Ontario are marginalized by Ontario in decision-making about the land, water, and wildlife as well as mineral exploration and mining projects that impact their homelands. Ontario has few policy and legislative commitments to addressing the impacts of mineral exploration and mining on First Nations and their rights and responsibilities, particularly in the far north of Ontario. Concepts such as free prior and informed consent (FPIC) remain elusive in Ontario’s practice, policy, and legislation and it is difficult to determine how Ontario considers these rights. Importantly, First Nations jurisdiction across Treaty No. 9 remains invisible in the mineral extraction sector, except for compulsory language around Section 35 rights in public facing documents like the current proposal. Actions that support reconciliation with First Nations are glaringly absent in the current document.

1. What opportunities do you see for Indigenous communities participating in resource development?

Providing opportunities for Indigenous communities to participate in resource development cannot happen without explicitly addressing rights, equity, and empowerment across the mining sector. These opportunities are currently missing from Ontario’s framework. While the modernization of the *Mining Act* provides more clarity around processes for consultation and early engagement, the current proposal is an important opportunity for Ontario to consider a higher standard with Indigenous Peoples, specifically FPIC. In general, Ontario’s laws, policies, and associated processes that affect First Nations are inconsistent with international standards, particularly those articulated in the United Nations Declaration on the Rights of Indigenous Peoples (UNDRIP).

First Nations generally seek partnership, shared resource agreements, and expect consultation and acknowledgement from government and industry. Yet, they face many barriers, especially if they are living near or downstream from mineral exploration and mining projects. First Nations bear the social costs and risks associated with these projects. While First Nations across Treaty No. 9 maintain longstanding social, cultural, and livelihood ties to the land, they often have little or no ability to affect decision-making about projects and the impacts on their values while also dealing with social injustices such as poverty, marginalization, and racial discrimination.

3. What supports might assist Indigenous communities with taking advantage of the many opportunities of a critical minerals strategy?

Indigenous communities are unlikely to be in a position to take advantage of the “many opportunities” of a critical minerals strategy without careful attention to addressing the risks at the same time. The document is written as if there are no risks. Yet, it is well established that mining on Indigenous lands adds risk to the social context throughout the mining cycle, including expansion of mines as well as mine

closure (*sensu* boom and bust cycles). Roads, smelters, and transmission features also expand the mine footprint and its impacts beyond scales typically examined in project-level impact assessment.

Some elements of the critical mineral mining process and infrastructure needed can enable greater access and connectivity between First Nations communities and the rest of Ontario, generate employment, and increase access to services that benefit local and Indigenous communities. However, First Nations are very aware of the negative impacts. The expanded mine footprint and its cumulative social and ecological impacts on Indigenous communities remain poorly addressed in this proposal and inadequately considered in project-level impact assessment under Ontario's legislation.

Several First Nations communities in the far north have expressed profound concerns given how impact assessments of the road projects associated with the Ring of Fire are being carried out during a global pandemic. These concerns must be addressed by the province before strategic development of critical minerals can be contemplated. Ontario's commitment to protection in the face of current and anticipated increased mineral exploration and resource extraction, particularly in the far north, has been minimal to non-existent. We recommend that Ontario provide explicit support to Indigenous-led approaches such as Indigenous Protected Areas and Guardians Programs that enable First Nation stewardship and monitoring while supporting traditional and conservation economies. These recommendations do not preclude development; rather, they are necessary preconditions that would heighten the potential to enable sustainable development benefits for communities.

III. Area of Focus: Developing an Ontario critical minerals list

1. Are there other considerations or factors that Ontario should take into account when developing a critical minerals list for Ontario?

While the demand for energy transition metals like lithium and cobalt (included among the critical minerals in this proposal) will be high, low-carbon energy technologies also require more iron and copper. As such, a strategy focused solely on government definitions of "critical" do not address the overall impact of the sector on disturbance to the land, waters, wildlife, and human societies and accompanying risks of doing so. Low-carbon energy technologies actually require more metal to produce the same power output as their fossil fuel counterparts while some energy transition metals like cobalt and lithium are predicted to require transformational change within the sector in order to meet demand. The anticipated demand will require significant new land use and resource extraction, including of iron and copper, necessary for low-carbon energy technologies.

3. How can Ontario leverage its critical minerals list to demonstrate to the global investing community that the province is ready to supply the world with critical minerals?

The global investing community, particularly in the drive towards low-carbon economies, is increasingly preoccupied with addressing ESG risks. While the document acknowledges this in the opening pages, the objectives and areas of focus completely fail to acknowledge ESG risks. The current proposal should be more transparent about ESG risks in order to leverage the critical minerals list proposed.

IV. Area of Focus: Enhancing investment in mineral exploration and development

1. What else could Ontario do to promote the exploration for and development of critical minerals in order to enhance investment?

Again, as acknowledged in this document, investors increasingly care about ESG considerations in the energy transition metals sector. There are already concerns about Ontario's record on FPIC with respect to First Nations communities, a practice that the mining sector has been addressing globally in standards and practice. Failure to address environmental concerns has led to costly delays and production disruptions at operations around the world, and companies are increasingly seeing environment and social risk as legitimate business risks. Ontario must address these considerations much more considerably and carefully in its policies and proposals around the mineral sector and mining.

As such, there is a need to acknowledge and address limitations in Ontario's policy and legislation in addressing ESG risks, including cumulative effects and climate change. We anticipate that future energy transition metal production will face increasing pressure both in terms of demand for low-carbon economies as well as increased scrutiny from communities, publics, and investors to adverse impacts, especially in areas where ESG risks are high such as the Ring of Fire. While the current proposal considers the *Mining Act*, Ontario's *Environmental Assessment Act* requires modernizing in order to address cumulative effects, sustainability, climate change, and Indigenous rights.

While plenty of advice has been provided to Ontario over the past decade on how regional and community-based environmental planning can consider risks and impacts to values and potential futures at relevant scales, we suggest that the current federal regional assessment (RA) of the Ring of Fire represents an important opportunity for Ontario, yet Ontario has provided no indication in over a year that it will participate in this federally-initiated process¹. We submit that a well-designed RA should enable consideration of the current and future ESG risks of mineral exploration and mining as well as other land uses on the ecosystems, First Nations communities, and ecosystem system services associated with carbon-rich peatlands. A regional approach to cumulative effects would be a critical service that would benefit Ontario in addressing development in the Ring of Fire and signal to investors that Ontario is addressing well known limitation in project-level assessments for mining in the face of climate change and other land use.

2. What else could Ontario do to prepare communities to be ready for, and actively participate in, exploration and development of critical minerals?

Participation in the federal RA of the Ring of Fire would send a strong signal to communities that Ontario is aware of their concerns and working to address the risks of cumulative impacts, particularly on downstream communities, in a proactive way and at ecologically and socially-meaningful scales.

V. Area of Focus: Regulatory and policy reform

Extraction and processing of metals is intensifying environmental crises in Ontario and around the globe, particularly biodiversity loss and climate change. Such activities affect ecosystems and the services they provide both directly, indirectly and cumulatively in space and time and these impacts extend beyond the mine footprint or productive life typically addressed in project-level impact assessment.

¹ <https://iaac-aeic.gc.ca/050/evaluations/exploration?projDocs=80468>

Mining activities also exacerbate pre-existing vulnerabilities, particularly in the environment and for First Nations communities. These impacts are typically addressed through impact assessment processes at either the federal/provincial level or through a harmonized approach. Impact assessment is a planning tool that is regarded as integral to sound decision making about impacts of development on the environment (biophysical and social) yet Ontario's *Environmental Assessment Act* is in need of modernization to address risks and impacts.

1. Are there any additional areas of the regulatory system that are creating barriers for critical minerals projects?

The regulatory system must be designed to yield outcomes that will bolster public and investor trust and confidence in development by addressing risks. This issue is at the heart of the current ESG movement, which is not so preoccupied with "barriers" as it is with ensuring that processes are meaningfully designed and executed. For example, impact assessment can be a vehicle for achieving FPIC, while effective impact assessment processes also can provide transparency and accountability by informing Indigenous communities and the general public about positive and negative impacts of a given undertaking, i.e., how positive impacts would be maximized, and how negative impacts can be mitigated or minimized.

The discussion paper ignores the context for the strategy in the first place, specifically the transition to a low-carbon economy in order to address climate change while respecting the rights of communities and workers and protecting the environment. Ontario currently lacks modern guidance (e.g., cumulative effects), legislation (e.g., Ontario's *Environmental Assessment Act*, lack of engagement in regional assessment for the Ring of Fire), and policy (e.g., conservation of carbon-rich peatlands in the far north, lack of community-based approaches to land use planning, support for Indigenous Protected and Conserved Areas) for mining-related social, ecological, and economic risk factors, particularly in the far north.

Importantly, Ontario's impact assessment legislation does not address cumulative effects, sustainability, or Indigenous rights in a way that will assuage Indigenous Peoples and public concerns in terms of risks to the environment and communities. Ontario is the only Canadian jurisdiction where an impact assessment is not mandatory for private sector projects like mining. We suggest this set of factors actually increases ESG risk in an already complex sector.

The implicit suggestion throughout this document is that Ontario is a less risky source of critical minerals and metals compared to other regions considered to be conflict or post-conflict zones. Conflict is but one factor Ontario needs to address in a strategy of this kind and the current framework perpetuates a parochial approach to First Nations roles and responsibilities in decision-making and jurisdiction, particularly under Treaty No. 9.

In conclusion, the Critical Minerals Framework Discussion Paper provides a high level overview of some of the issues associated with the mineral exploration and extraction of critical minerals in Ontario, but falls short in creating a comprehensive strategy to support Ontario's decision-making about mineral extraction and land use in a strategic and regional way. The document acknowledges that ESG is important, yet ignores how environmental and social risks and trade-offs associated with mineral development will be managed in the face of climate change, biodiversity loss, and First Nations rights and responsibilities, particularly in the far north.

Thank you for your consideration of our comments and recommendations on this proposal. We welcome opportunities to engage in any discussion regarding our submission.

Sincerely,



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