

Ms. Mary Hennessey, Director, Northern Environmental Initiatives Office Ministry of the Environment and Climate Change 2 St. Clair Avenue West, Floor 12A Toronto, ON M4V 1L5

April 1, 2015

Via E-mail: mary.hennessey@ontario.ca

Re: Terms of Reference for Noront's Eagle's Nest Project (Reference No: 11102)

Dear Ms. Hennessey,

As you are aware, Wildlife Conservation Society (WCS) Canada provided comments on the Terms of Reference (NB102\_390/1-7) for Noront's Eagle's Nest Project (Project) under the voluntary agreement with Ontario's Ministry of the Environment, now Ministry of the Environment and Climate Change (MOECC), on May 7, 2012 (Appendix 1). We provided these comments to Noront Resources Ltd. directly as well and received feedback from Noront on our comments on August 1, 2012. We responded to these comments in a phone call to Mr. Neil Westoll on August 16, 2012. On August 21, 2002 we indicated to Noront and MOECC that we were satisfied with their response, but emphasized our expectations that Noront would address a number of concerns in the environmental assessment (EA). Noront submitted an amended Terms of Reference (ToR) to MOECC in October 2012.

We also provided written comments to the Canadian Environmental Assessment Agency on the draft Environmental Impact Statement (EIS) Guidelines for the Project on December 16, 2011, and directly to Noront on their aquatic baseline technical report on November 16, 2013. We did not provide further comments or review on the draft EIS or technical support documents.

We are writing today because we understand that MOECC is moving forward to make a decision on Noront's amended ToR<sup>1</sup>. We are seeking clarification from MOECC on several process-related issues, given a number of changes in the situation in the Ring of Fire region and the length of time that has passed between the submission of the ToR and the Minister's decision. We also take this opportunity to reiterate to MOECC our concerns about the ToR. Although we fully understand that the prolonged period of time waiting for this key step creates challenges for Noront, we are interested to find out how the complex set of issues that precipitated the delay in the first place have been, or will be addressed, in the overall EA process, which begins with the ToR.

<sup>&</sup>lt;sup>1</sup> http://www.cbc.ca/news/canada/thunder-bay/ring-of-fire-ontario-has-gun-to-our-head-first-nation-chief-says-1.3006202

Premier Wynne's mandate letter to Minister Murray<sup>2</sup> is very clear about MOECC's role in the Ring of Fire. MOECC must work to "ensure that the regional and cumulative impacts of proposed development are considered." As such, we have the following process-related questions that we would like a written response to:

### 1. How have WCS Canada's comments and concerns on the final ToR been addressed by MOECC?

# 2. How will MOECC address apparent inconsistencies between the Regional Framework Agreement and the provincial ToR?

Since Noront's submission of the final ToR in November 2012, Ontario, represented by the Minister of Northern Development and Mines, negotiated a Regional Framework Agreement<sup>3</sup> with the nine Matawa communities directly impacted by the Ring of Fire. This Agreement includes a focus on enhanced participation in Noront's EA as well as decision making on regional infrastructure including Noront's Project. Our understanding of the Regional Framework is that it creates a comprehensive environmental agreement encompassing the project review process, shared decision making with First Nations and other governments and an appropriate First Nation consultation process. Approval of the ToR without conditions that recognize these issues shows a lack of coordination on mining proposals and environmental planning in the Ring of Fire between all the relevant ministries (MOECC, Ministry of Northern Development and Mines (MNDM), Ministry of Natural Resources and Forestry (MNRF)), Matawa communities and Ontario with their respective negotiators. How can MOECC reconcile the EA process for Noront outside of the context of the Regional Framework, and ensure that it does not preclude options in the Framework for regional infrastructure planning and implementation, cumulative effects, and enhanced participation by First Nations in environmental assessment? We also think a separate consultation process for Noront on its Project will be difficult given limited capacity of First Nations to be engaged in concurrent negotiations around the regional framework and land use planning.

# 3. How does the acquisition of Cliff's chromite assets by Noront affect the scoping of Noront's ToR and subsequent EIS/EA?

According to the amended ToR, Noront will identify and assess the cumulative environmental effects of the Project in combination with "past, present or reasonably foreseeable future projects and activities". In previous comments, we have argued that both Cliffs and Noront needed to include the other's project as reasonably foreseeable future projects for the assessment of cumulative effects. However, now that Noront has acquired Cliff's assets, we think there is an even stronger case to be made for Noront to address both their Project and the chromite deposit in a cumulative effects assessment. How will MOECC address this change in their current approval process of the ToR?

Since there was no public consultation on the amended ToR we take this opportunity to reiterate some of our ongoing concerns with EA, specifically in the Ring of Fire:

#### 1. Cumulative Effects

Cumulative effects are an important consideration for this Project, the Ring of Fire, and Ontario's Far North. It is unfortunate that Ontario's *Environmental Assessment Act, 1997* does not explicitly include

<sup>&</sup>lt;sup>2</sup> https://www.ontario.ca/government/2014-mandate-letter-environment-and-climate-change

<sup>&</sup>lt;sup>3</sup> http://www.mndm.gov.on.ca/sites/default/files/rof\_regional\_framework\_agreement\_2014.pdf

cumulative effects. In addition, MOECC is required to consider cumulative effects in its decision making under its Statement of Environmental Values, but has no way of assessing the cumulative effects of the projects it approves. While MOECC's recent (2014) *Code of Practice for Preparing and Reviewing Terms of Reference for Environmental Assessments in Ontario encourages* proponents to include information on cumulative effects of their projects, we think this should be required. The lack of attention to cumulative effects in Ontario's environmental assessment (EA) process is an oversight that should be addressed in a review of Ontario's environmental assessment process as it relates to the mining sector.

#### 2. Cumulative Effects on Caribou

The amended ToR indicates that it will address cumulative effects of the Project on caribou ranges in the local and regional study areas (pg. 31). As a species occurring in the Project area with a demonstrated vulnerability to industrial development, caribou conservation at the range scale remains an important priority for consideration in the environmental assessment of this Project. Since the ToR was submitted to MOECC, MNRF has released the State of Woodland Caribou and range assessment reports, including those affected by the footprint of the proposed Project (e.g., Missisa, Ozhiski). Data show high occupancy by caribou in the Project's footprint. Ontario's Range Management Policy<sup>4</sup> provides direction on the integration of range condition into activity review and assessment, and when planning and authorizing activities within caribou ranges, including cumulative disturbance on caribou population ranges. This information is not addressed in the current ToR and this should be a condition in the cumulative effects assessment for the EIS/EA.

## 3. Cumulative Effects of New Infrastructure

Ontario committed \$1 billion for new infrastructure<sup>5</sup> for accessing the Ring of Fire. As described in Noront's amended ToR, the provincial commitment was to an all-season north-south route in support of Cliff's Chromite Project (pg. 24). Noront indicated that it would adopt the north-south route for their Project. We are no longer clear on whether this commitment to a north-south route is viable given the departure of Cliffs. We do not know what the implications are for assessing the Project's proposed access alternatives. Mine site access alternatives must be reconsidered for the Project, including the cumulative effects assessment.

We do not see how the current EA process, led by Noront, can adequately manage the ecological, social, and economic risks of access management to the Ring of Fire given the current complexity and the lack of any plan for the region as well as various stages of community based land use planning in the region. For example, in addition to Noront's preferred east-west route and an unknown Ontario commitment to a north-south route (?), there is a joint Ontario and Federal \$732K grant to First Nations to consider various transportation and energy routes, Ontario's establishment of a Development Corporation which includes the development of a third-party report on existing infrastructure proposals to establish a common technical basis for future decisions<sup>6</sup>, and the regional infrastructure and energy planning and implementation negotiations as part of the Regional Framework Agreement. This cannot be adequately addressed within the narrow scope in the ToR. We suggest this assessment is a provincial responsibility through the Regional Framework Agreement that must, in turn, direct

<sup>&</sup>lt;sup>4</sup> https://www.ontario.ca/document/range-management-policy-support-woodland-caribou-conservation-and-recovery

<sup>&</sup>lt;sup>5</sup> http://news.ontario.ca/mof/en/2014/04/ontario-investing-in-the-ring-of-fire.html

<sup>&</sup>lt;sup>6</sup> http://news.ontario.ca/mndmf/en/2014/02/ontario-driving-progress-on-ring-of-fire.html

Noront and future projects on where the access will be given broader regional implications for the environment and communities. Ontario has received recommendations for regional planning in the Far North, and the Ring of Fire in particular, from scientists and stakeholders given that new roads and energy corridors will invite ecological and social cumulative effects. Ultimately, it seems that MOECC has no ability to address this issue either within the ToR and EA or other projects that may emerge in the Ring of Fire. We urge MOECC to consider the ecological, social, and economic risks of enabling piecemeal development and infrastructure planning through the approval of Noront's preferred route.

# 4. Assessing Alternatives

The version of the ToR that we reviewed and commented on was based on incomplete field data and lacked relevant information for preparing and assessing the alternatives to both the Project and alternative routes and sites. At the time, we were also concerned about the qualifying statements in Section 11 of the ToR regarding the need for "flexibility in EA". We remain concerned about this flexibility, given the complex set of issues in the Ring of Fire that have only increased since the ToR's submission. In addition, the norm in EA practice is for proponents to "scope down" their ToR to focus on their preferred option for EIS/EA<sup>7</sup>, and this ToR appears to do this too. Similarly, the practice in Ontario shows that the Minister is also willing to accept these narrowly-scoped ToR and consequently EIS/EA. The EIS/EA should not be limited to the preferred alternative of the proponent, but consider all alternatives given regional implications.

## 5. Addressing Climate Change.

Climate change needs to be addressed more explicitly. The response from Noront on our comment that the Project does not address climate change was that the "short-term variability" rather than any future projections were more relevant given the anticipated short lifetime of the mine (11 years). We suggest that Noront needs to consider extreme weather events in addition to winter road access in the ToR and climate change scenarios are an important consideration for closure plans for remote, northern mines<sup>8</sup>. Given that infrastructure (whether roads or energy) will be permanent, and Noront's project is currently the most likely region-opening development for further mining in the region, climate change requires more thoughtful consideration than proposed in the ToR.

In addition, we have just reviewed and commented on MOECC's climate change discussion paper and urge MOECC to see the Ring of Fire as an important opportunity to view new industrial development that it has the authority to approve, as well as transportation planning associated with the Project, through a climate change lens. Specifically:

• Mines in remote regions like Ontario's Far North represent an important opportunity to consider the response to new industrial development within intact peatland and wetland complexes, with respect to climate change. For example, proposed projects like Noront's Eagle's Nest Project, advanced exploration projects like Metalex Ventures Ltd., expansion of the Victor Diamond mine and the existing Musselwhite mine, as well as other exploration projects that may enter into advanced phases in the near future (particularly in the Ring of Fire), generate high demand for fossil fuels and contribute to greenhouse gas emissions. While the mining sector is sensitive to climate change<sup>9</sup>, new mines within

<sup>&</sup>lt;sup>7</sup> Lindgren, R. D. and B. Dunn. 2010. Environmental Assessment in Ontario: Rhetoric vs. Reality. Journal of Environmental Law and Practice **21**:279-303.

<sup>&</sup>lt;sup>8</sup> Rhéaume, G. and M. Caron-Vuotari. 2013. The Future of Mining in Canada's North. Conference Board of Canada.

<sup>9</sup> http://www.davidsuzuki.org/publications/downloads/2009/Climate\_Change\_And\_Canadian\_Mining.pdf

- the Far North also reduce the capacity of the environment to function as a carbon store, given the known challenges in achieving ecological restoration of peatlands and wetlands at scales relevant to the Far North ecosystem processes and functions.
- New infrastructure for mines like Noront's Project in the Ring of Fire, and the transportation it will
  require to be viable, requires careful consideration in the Far North where infrastructure will also be
  vulnerable to climate change<sup>10</sup>, creating safety and liability risks for communities, industry, and Ontario.
  Proposals for new infrastructure, including this Project, need to viewed through the lens of a carbonconstrained future.

Finally, we reiterate that it is crucial to link the project-level assessment of an "undertaking" like this one, that will open up the region, within a broader EA process that can address cumulative effects as well as public and First Nations participation more effectively and efficiently. It must also address the key social impacts given First Nations interests. Such a process should also be more equitable to the proponent as project-level EA otherwise place this regional responsibility on Noront. We believe a process similar to a regional strategic environmental assessment (R-SEA) <sup>11</sup> offers important advantages to both government, First Nations, and proponents like Noront. There are mechanisms under existing legislation to do this. For example, under *Canadian Environmental Assessment Act, 2012,* the Federal Minister of the Environment can undertake a regional environmental assessment at the request of the province. We were encouraged that some of these issues were discussed at the MNDM/Schad Foundation-sponsored gathering in Toronto in February, and there seemed to be agreement regarding the shortcomings of existing processes to confront the key challenges for sustainability in the Ring of Fire, and Far North, given mining, new infrastructure, community interests, and regional-scale issues such as caribou management, ecosystem services, and climate change. Going forward, we urge MOECC to consider how it can support the most *desired* outcomes in the Ring of Fire rather than the most likely ones<sup>12</sup>.

Sincerely yours,

Cheryl Chetkiewicz, PhD

THEL RETRESMEN

Justina Ray, PhD

cc: Alissa Sugar, Special Project Officers, MOECC (via e-mail)

cc: Kathy Brady (via e-mail)

cc: Mr. Bob Rae (via e-mail)

cc: Colin Webster, VP Sustainability, Noront Resources Ltd. (via e-mail)

cc: Robert Clavering, CEAA Project Manager for Eagle's Nest Project (11-03-63925) (via e-mail)

12 http://www.ccme.ca/files/Resources/enviro\_assessment/rsea\_principles\_guidance\_e.pdf

<sup>&</sup>lt;sup>10</sup> Bristow, M. and V. Gill. 2011. Northern Assets: Transportation Infrastructure in Remote Communities. Publication 12-139, Ottawa.

<sup>&</sup>lt;sup>11</sup> Chetkiewicz, C. and A. M. Lintner. 2014. Getting it Right in Ontario's Far North: The Need for a Regional Strategic Environmental Assessment in the Ring of Fire [*Wawangajing*]. WCS Canada and Ecojustice, Toronto, ON.

Appendix 1.	Comments from WCS	Canada on Noront's	Terms of Reference (	May 2012).



Ministry of the Environment, **Environmental Approvals Branch** 2 St. Clair Avenue West, Floor 12A Toronto, ON M4V 1L5

May 7, 2012

Via E-mail: alex.blasko@ontario.ca

Re: Terms of Reference for Noront's Eagle's Nest Project (Reference No: 11102)

Dear Alex,

Wildlife Conservation Society (WCS) Canada provides the following comments on the Terms of Reference (NB102\_390/1-7) for Noront's Eagle's Nest Project ("Project") under the voluntary agreement with Ontario's Ministry of the Environment. We are submitting our comments on the Terms of Reference in our respective capacities as scientists specializing in fish and wildlife ecology, conservation biology, and landscape ecology in the region on behalf of the WCS Canada (Appendix 1).

WCS Canada has also provided written comments to the Canadian Environmental Assessment Agency (CEA Agency) on the draft Environmental Impact Statement (EIS) Guidelines for the Project. WCS Canada also outlined our concerns for this Project and the concomitant Cliffs Chromite Project, particularly the implications for cumulative effects within the region and the area known as the "Ring of Fire". This latter concern is the main reason that WCS Canada will continue to request the establishment of a Joint Review Panel (JRP) for the Project, coordinated and harmonized with the province of Ontario that includes First Nations representation, with both a mechanism to consider infrastructure in the Project and a means to incorporate a broader regional strategic assessment (see below).

We acknowledge the positive effort Noront has made in engaging in environmental assessment in Ontario. The Ontario *Environmental Assessment Act (EAA)* is a far-sighted environmental planning tool for the "betterment" of the people of Ontario, providing for the "protection, conservation and wise management" of the environment. For example, the *EAA* specifically requires proponents to (a) consider a reasonable range of alternatives to the project; (b) assess the environmental effects of such alternatives; and (c) demonstrate that their preferred alternative is environmentally superior and

<sup>&</sup>lt;sup>1</sup> EAA, s. 2.

necessary. Moreover, the *EAA* requires proponents to systematically address these matters with public input at key stages of the environmental assessment process, which is intended to be traceable, rational and iterative in nature.

While project level assessment processes have led to more environmentally informed and generally more transparent and participative decision-making on some undertakings in Ontario, they have typically not been able to deal well with broader and underlying issues related to assessing and mitigating cumulative effects, strategic objectives and alternatives for addressing sustainability (of the region and not just the mine). For example, it is well recognized that the cumulative effects that will be triggered by the Project, including the permanent infrastructure and associated opportunities and revenues the Project anticipates, cannot be addressed adequately at the project level in isolation or without regard to other projects being planned, including those that will be facilitated by the road from the Ring of Fire to Nakina being proposed for the Cliffs Project. Preliminary decision-making about access routes and related infrastructure will set critical precedents for the Ring of Fire and the region, which demands an assessment process that is both strategic and at a regional scale.

Although project level EA is the <u>only</u> significant public opportunity and Aboriginal deliberation on these larger matters, they are simply too narrowly mandated and come too late in decision-making to be effective vehicles for examining strategic concerns and alternatives that may affect a region or sector and tend to both slow down and weaken most project EAs. We see no evidence that the case will be different with this Project.

It is, therefore, crucial to link the project-level assessment of an "undertaking" that will open up the region within a broader environmental assessment process that can address cumulative effects as well as public and Aboriginal participation more effectively and efficiently. Such a process would also be more equitable to the proponent as project environmental assessments otherwise place this regional responsibility on Noront. We believe a process similar to a regional strategic environmental assessment (SEA) (Attachment) offers important advantages to resource companies like Noront because SEA can:

- Establish a more certain context for project planning that addresses regional strategic actions such as land use planning (under MNR's jurisdiction) and growth management planning (under MNDM's jurisdiction), cumulative effects, and environmental change.
- Clarify and simplify project assessment requirements.
- Speed project level assessment review and approval processes. For example, project EA is currently the only means of accessing decision-makers such as First Nations, stakeholders such as NGOs, and the general public on a given project. Project-level EA frequently gets bogged down in discussions of broader public policy matters. These discussions cannot be addressed adequately at the project level and decisions made at the project level rarely offer effective means for addressing broader public policy interests. These discussions can and do, in our experience, delay the project.
- Become an indicator or component of standards and guidelines associated with social responsibility for financial institutions using credit risk management frameworks as is currently the case with international development.

The Proponent should not submit a Terms of Reference until field data and relevant information are available to prepare and assess the alternatives. The incomplete basis for the Terms of Reference makes it difficult to objectively assess the alternatives and evaluate the gaps in information. Having a completed set of field and engineering data would also address the qualifying statements in Section 11 regarding the need for flexibility in EA, particularly if the Terms of Reference are approved as is. However, we have the following **general** comments on the Terms of Reference and the environmental assessment process in Ontario.

1. The draft EIS for the federal assessment process and the draft Terms of Reference for Ontario are significantly different.

**We recommend** an appropriately harmonized Terms of Reference that includes the stronger aspects of both approaches. Specifically, the Terms of Reference should:

- a. Use the Ontario *Environmental Assessment Act (EAA)* definition of environment which includes the social, economic and cultural aspects as well as the biophysical.
- b. Any differences in approach or definitions should be resolved by deferring to the broader or more precautionary of the two.
- c. A commitment in Ontario EA to sustainability-based assessment.
- d. Includes the explicit review of alternatives, as per the Ontario EA. We support the use of a robust alternatives approach that is transparent and addresses assumptions, costs and benefits.
- 2. The Project does not adequately address the purpose of Ontario's *EAA*, namely the "betterment" for the people of Ontario.

**We recommend** the Terms of Reference explicitly address sustainability and positive net gains of the Project.

**3. The Project focuses on the biophysical environment.** Environment in Ontario's *EAA* is broadly defined however most of the Terms of Reference focuses on the biophysical environment.

**We recommend** the Terms of Reference address key socio-economic considerations given the complex social systems and the economic constraints of northern resource development that the Project will impact. Two main reasons for this recommendation are:

- 1) Mining is a cyclical undertaking and the boom and bust nature due to market uncertainty is frequently accepted as a given in the environmental assessment of these undertakings.
- 2) The Terms of Reference does not address the legacy of infrastructure in the closure phase of the Project. Maintenance and liability of permanent infrastructure on the scale given the unique environmental and changes predicted under climate change is unprecedented in the north and should be addressed explicitly in the Project closure plan.
- 4. The Terms of Reference should more explicitly address direct, indirect and cumulative impacts on caribou. As a species occurring in the project area that has a demonstrated vulnerability to industrial development, caribou are a clear priority for consideration in the environmental assessment of this Project. Evidence from radio-collaring indicates that caribou using the larger area encompassed by the proposed mine and its infrastructure use many other areas in northern Ontario, meaning that impacts from the project itself have repercussions elsewhere well beyond the

footprint. Regarding the determination of "impacts on caribou habitat values", we note that impacts to caribou must be evaluated at the population level, and that reductionist approaches commonly used in EA evaluations (what percentage of modeled habitat is coincident with the direct project footprint) provides a limited perspective of impact.

**We recommend** the Terms of Reference address the wide-ranging behavior of caribou in the region, the scientific data about vulnerability of caribou to industrial development, and the issue of cumulative effects in caribou conservation in Ontario. Impacts of industrial development on caribou must be thoughtfully considered in context of this complex set of factors and tied to population parameters.

The principal areas of concern regarding impacts of the Project on caribou that should be addressed in the Terms of Reference are:

- a) permanent loss of habitat;
- b) roads and other linear corridors serving as barriers to caribou movements and use;
- disturbance from infrastructure and dust associated with the project resulting in temporary or permanent displacement;
- d) cumulative effects arising from piecemeal development that is initiated by this project leading to more permanent displacement; and,
- e) increased wolf or bear predation either through declines in moose or increased road densities promoting ease of access to all predators, including human hunters.
- 5. The Project does not address climate change in the Terms of Reference.

**We recommend** the Terms of Reference address climate change more explicitly. Scenarios for the Far North have been developed and described in a number of publicly available documents including the 2009 Expert Panel Report on Climate Change Adaptation in Ontario and the Far North Science Advisory Panel Report.

6. The Terms of Reference do not address how the Project will assess cumulative effects within the EA.

We recommend the Terms of Reference address cumulative effects of Project and alternatives explicitly.

7. The Terms of Reference does not address the need for the Project.

**We recommend** the Terms of Reference consider the "need" for the undertaking which will then provide a basis for assessing the alternatives to the Project.

# Specific comments on the Terms of Reference by section.

**3.1 INDICATION OF HOW THE EA WILL BE PREPARED**. The Terms of Reference should reference the appropriate sections in the Supporting Documentation for each alternative that is not being carried forward.

- **SECTION 4.0 PURPOSE OF THE UNDERTAKING.** The airstrip component is not clear in the Terms of Reference. **Pg. 5**. Implies the airstrip has received approval under an EA, but was not built. **Section 5.4.10** suggests the airstrip will be built but assessed under the current Project. This must be clarified.
- **SECTION 4.0 PURPOSE OF THE UNDERTAKING.** The Terms of Reference must indicate where the likely smelter customers for this Project are given implications for infrastructure post-closure and sustainability assessment beyond the mine's projected life span (11 years).
- **SECTION 4.0 PURPOSE OF THE UNDERTAKING.** The Terms of Reference must identify the nearest certified landfill for mine wastes. If this is a new undertaking, it should be addressed.
- **SECTION 4.0 PURPOSE OF THE UNDERTAKING.** Wolves and bears as well as other wildlife only become "nuisances" because of poor waste management practices. They are not inherently nuisances as this section suggests. Fenced off facilities are less effective for birds and more attention should be placed on minimizing wildlife contact, including hunting and fishing, and habitat loss. The reference for current best management practices and standards that Proponent will adopt should be provided in the Terms of Reference.
- **4.3 FAR NORTH PLANNING ACT.** The Terms of Reference provide good background and information on the Act but it must acknowledge the fact that there is no mechanism that integrates land use planning with environmental assessment and infrastructure in particular is decentralized in Ontario planning and decision-making. The Terms of Reference are not clear about whether the Project is a *de facto* component of the emerging land use plans for **some** but not all of the First Nations communities in the Ring of Fire. The Terms of Reference are not clear on how the Project interacts with land use planning processes. This must be more explicit in the Terms of Reference.
- **5.2 PROJECT RATIONALE.** By suggesting the Project will both "protect the environment and maximize socio-economic benefits" demands more information than presented and continues to promote a vague and possibly inappropriate understanding of sustainable development.
- **5.2 PROJECT RATIONALE.** Pg. 14. It is unclear what "existing metal mines are near depletion". The Terms of Reference should identify these. This information is useful to better understand cumulative effects in the region, particularly in specific watersheds, and sustainability in general.
- **5.3.2 Construction Phase.** Given the sensitive and ecological and social values associated with eskers in the region, it is important that the Terms of Reference more specifically address where the permitted aggregate sources for all weather roads and operations are located.
- **5.3.2 Construction Phase.** The decentralized nature of road planning and decision-making makes it difficult to determine why roads are placed in the current locations in the Terms of Reference. The Terms of Reference should be more explicit on how decisions about road locations and placement are being made and contained within emerging land use plans by communities affected by infrastructure decisions that the Proponent is making. Road planning should include ecological and social values in addition to engineering considerations.

### 5.3.3 Operations Phase.

- We support the development of a road management/access strategy for the all weather road and winter road.
- This strategy must include closure plans in addition to operations and indicate who is responsible for these roads and infrastructure when the mine closes.
- In order for this strategy to be effective, attention must be paid to climate change impacts on
  infrastructure, particularly given climate change scenarios for the Far North, the
  wetland/peatland complexes, and increasing body of evidence on risk and costs associated with
  all-weather roads in northern climates.
- There is no regional approach to transportation or infrastructure in the Far North, however, it is important to be aware of the ongoing multi-modal strategy being developed for infrastructure planning in northern Ontario.
- **5.4.4 Concentrate Handling and Storage.** "It will be buried below the frost line in the wetland." The Terms of Reference should more adequately address how permafrost and changing permafrost conditions will be addressed along the scoped slurry pipeline route. This information would indicate that the Proponent has addressed climate change implications on route planning.
- **5.4.4 Concentrate Handling and Storage.** The Terms of Reference should indicate how the Proponent determined the rate and intensity of truck transportation on various roads (daily and seasonally). In addition, location of fuel and truck storage should be identified for assessing possible spill and containment impacts.
- **5.4.4 Concentrate Handling and Storage.** Although the loading facility may be located in the Brightsand range, other elements of the Project e.g., infrastructure, are outside this range. The Terms of Reference should address how impacts to caribou beyond the Brightsand Range will be evaluated given information on caribou movements and seasonal use of the landscape.

All-season Access Road. Approximately 70 water crossings have been identified along the proposed all-season access corridor. In addition to noting the concerns about caribou movement and habitat as a result of this access road, this section must explicitly acknowledge the need for fish and aquatic studies that will be undertaken by the Proponent to address aquatic habitat and connectivity changes resulting from the water crossings. Road crossings have been found to negatively impact abundance, distribution, and diversity of fish species in streams and rivers. While engineering is one important aspect of road placement, the ecological values of fish and wildlife must be included in the decision-making on routing and alternatives for crossing placement.

All-season Access Road. Aggregate sourced from licensed or permitted sites including rock quarries and eskers. Given comments elsewhere in the Terms of Reference about the ecological and social values of eskers, as well as the known limited availability of eskers in this region, it is critical to explain how the Proponent will determine when and where eskers will be used for road-building, and what the possible consequences of this will be.

Winter Road. Clearing a right-of-way to a minimum width of 7 m. This statement about "slash being pushed to the edges as necessary and burned, piled, angled etc. to facilitate the movement of caribou" is unsupported and suggests a lack of understanding about how caribou interact with roads of this nature (including the anticipated traffic volume). The Terms of Reference should address concerns about the impact of the Project on caribou explicitly described in our general comment above.

- **6.3 ALTERNATIVES TO.** In order to provide meaningful consideration of "alternatives to", this section must provide a compelling statement on why Noront wants to mine this body and describe the "need" for it, both socially and economically.
- **6.4 ALTERNATIVE METHODS OF CARRYING OUT THE PROJECT.** The Terms of Reference should provide more detail on why the Proponent will not address alternative mining methods and infrastructure planning being pursued by Cliffs Chromite Project given the proximity and the same concerns about the ecologically sensitive environment in which each Project is proceeding.
- **5.4.8.4 Hazardous Waste.** The Terms of Reference should indicate how contaminated soil associated with anticipated leakages on the pipeline will be remediated.
- **7.1 PROJECT DESCRIPTION.** Noront's current scoping study methodology includes trade off studies that investigate certain alternatives on the basis of both the cost effectiveness and the potential environmental and social effects of different options. In order to investigate alternatives in a meaningful fashion, the Proponent must consider a variety of approaches besides cost-benefit analyses to assessing alternatives that are fairly well documented for EA in addition to addressing sustainability more explicitly. The Terms of Reference should include these different approaches.
- **7.2.1** General Study Area. The EA will define specific study areas as noted above for each of the study components, and each component will either be assessed within the regional study area or within the local study areas as determined by the baseline studies or the effects assessments. We recommend a nested scale approach with watersheds e.g., the combined area of the Attawapiskat, Ekwan and Winisk watersheds, to provide a suitable ecological proxy for regional and hydrological connectivity.
- 7.2.2 Caribou Study Area. The local and regional study areas will incorporate the potentially affected caribou range or ranges. Cumulative effects of this Project, as well as other developments in the Ring of Fire on caribou will be assessed as directed by the Ontario Caribou Conservation Policy under the ESA (2007). Noront is currently a member of the MNR working group which aims to develop resource selection modelling for caribou in the Ring-of-Fire region.
  - We recommend a scaled approach to resource selection function (RSF) development and attention to validation methods for assessing the RSFs<sup>2</sup>.
  - RSFs should be ultimately linked to population viability and/or density to be useful for monitoring and impact assessment<sup>3</sup>.
- **7.7. Hydrogeology.** The Terms of Reference mention the disproportionate value of eskers for caribou, wolves, and likely other plant species. The Terms of Reference should describe how the ecological (and social) values of eskers will be assessed before the Project commences, particularly given the emphasis on the need for aggregate.

-

<sup>&</sup>lt;sup>2</sup> Boyce, M. S. 2006. Scale of resource selection functions. Diversity and Distributions **12**:269-276.

<sup>&</sup>lt;sup>3</sup> Johnson, C. J., S. E. Nielsen, E. H. Merrill, T. L. McDonald, and M. S. Boyce. 2006. Resource selection functions based on use-availability data: Theoretical motivation and evaluation methods. Journal of Wildlife Management **70**:347-357.

**7.10.2 Aboriginal Communities.** The Terms of Reference should include whether the Proponent is engaging with Nishnawbe Aski Nation (NAN), an Aboriginal political organization representing 49 First Nation communities within James Bay Treaty 9, Matawa Tribal Council and Mushkegowuk Tribal Council.

**7.10.3 Cultural Resources.** It is unclear how archaeological or cultural resources identified by First Nations in land use planning will inform archaeological studies being conducted by the proponent.

**7.13 POTENTIAL EFFECTS OF THE PROJECT.** An example of potential effects that may require more detailed investigation include the development of <u>preferential pathways for wildlife movement</u> from utility and infrastructure corridors, and the increased human access to remote areas. The use of the terms "preferential pathways" is vague and unclear in this section. More relevant would be assessing alternative linear development features and using modeling to better understand how wildlife behaviours will change with respect to human use (including intensity) given transportation impacts. There are a number of useful models to address access to remote lakes and the impact of fishing. These considerations should be part of any road management strategy or plan.

**7.13 POTENTIAL EFFECTS OF THE PROJECT. Seepage to soils and groundwater and runoff to surface water from temporary waste rock piles/aggregate piles during initial mine development. However, the temporary stockpiles will be stored on pads to capture and treat runoff.** The Terms of Reference should define temporary to better determine the impacts of acid-mine drainage and what the conditions are for monitoring during this temporary storage phase.

**7.13.8 Potential Socio-Economic Effects of Mine Operation.** There are a number of well-documented negative **social** impacts of mines, particularly on remote Aboriginal communities<sup>4</sup>. These should be added and addressed more explicitly.

- Employing an SIA is helpful. We encourage a comparative case study method similar to those employed for the James Bay hydro-development and the Mackenzie Valley Pipeline<sup>5</sup>.
- The mine location also creates inequity among Ring of Fire communities, both positive and negative, by the virtue of where the facilities and infrastructure are planned.

**8.2.2.1** Determination of the significance of an Impact. Impact Categories: Each impact category may have a set of sub-category topics that address elements of the IFC Performance Standards and other international guidelines or issues raised during consultation. The International Finance Corporation (IFC) Performance Standards are mentioned once and at the end of the document with no accompanying details. These standards are substantive and address biodiversity and social aspects of development. The Terms of Reference should indicate how the Proponent means to address these standards and clarify the Proponent's intention to determine the extent to which the Proponent will comply with internationally accepted standards for resource extraction operations.

**11.3 PRE-EA CONSULTATION ACTIVITIES.** Efforts by Noront to engage with communities are commendable and should continue to be documented and assessed.

<sup>5</sup> Asselin, J., and J. R. Parkins. 2009. Comparative Case Study as Social Impact Assessment: Possibilities and Limitations for Anticipating Social Change in the Far North. Social Indicators Research **94**:483-497.

<sup>&</sup>lt;sup>4</sup> Gibson, G. and Klinck, J. 2005. Canada's Resilient North: The Impact of Mining on Aboriginal Communities. Pimatisiwin: A Journal of Aboriginal and Indigenous Community Health 3(1). 115-140.

In closing, we observe that in order to meet the ambitious goals articulated in this Terms of Reference, the Ministry of the Environment must both demand a complete set of information from the Proponent, and have an adequate and transparent review process in place that clearly places this Project with respect to the needs of Aboriginal communities and Ontarians as per the EAA. This will require a process that allows for both expert review and consultation with communities. This means an active solicitation by the Ministry of the Environment of appropriate expertise and a transparent process for indicating how comments were used (or not) to revise the Terms of Reference, EA documents, plans, and processes. Only a considered process will ensure claims being made by the Proponent have a solid basis and add new information to address the unique environmental, social and economic context in Ontario's Far North.

Sincerely yours,

Cheryl Chetkiewicz, PhD

JANUL PETVOLMEN

Jenni McDermid, PhD

Justina Ray, PhD

cc: Matawa communities, Mr. Raymond Ferris, Matawa Tribal Council

cc: Grand Chief Stan Louttit, Mushkegowuk Tribal Council

cc: Grand Chief Stan Beardy, Nishnawbe-Aski Nation

cc: Neil Westoll, Environmental Advisor, Noront Resources Ltd. (via e-mail

consultation@norontresources.com

cc: David Bell, CEAA Project Manager for Eagle's Nest Project (11-03-63925 ) (via e-mail

dave.bell@ceaa-acee.gc.ca)

# Appendix 1.

Dr. Cheryl Chetkiewicz is an Associate Conservation Scientist with WCS Canada hired to support broad-scale and community-based conservation planning in the Far North, specifically wildlife research and monitoring and developing cumulative effects landscape models for northern Ontario.

Dr. Jenni McDermid is a Fish Conservation Research Scientist with WCS Canada and a fisheries biologist conducting field research to address impacts on lake trout and lake sturgeon from increased road access, mining activities, hydro development, and climate change.

Dr. Justina Ray is both the Director and Senior Scientist for WCS Canada. Dr. Ray has been engaged in field research in northern Ontario and is one of the few biologists to spend significant time in this remote region over the last decade, with a focus on wolverine and caribou. Dr. Ray serves on MNR's Provincial Caribou Technical Committee and the Ontario Wolverine Recovery team and was a member of the MNR's Far North Science Advisory Panel.