



Eagle's Nest Project  
Canadian Environmental Assessment Agency  
55 St. Clair Avenue East  
Suite 907  
Toronto ON M4T 1M2  
Telephone: 416-952-1576  
Fax: 416-952-1573

January 5, 2012

Via E-mail: [eaglesnest@ceaa-acee.gc.ca](mailto:eaglesnest@ceaa-acee.gc.ca)

**Re: Draft Environmental Impact Statement (EIS) Guidelines for Noront's Eagle's Nest Project (Registry reference number 11-03-63925)**

Dear Mr. Bell,

On November 1, 2011, the Canadian Environmental Assessment Agency (CEAA) commenced with a Comprehensive Study process pursuant to the *Canadian Environmental Assessment Act* for Noront's Eagle's Nest Project (Project). CEAA subsequently prepared the draft Environmental Impact Statement (EIS) Guidelines to identify potential environmental effects to be addressed and information that needs to be included in the Proponent's EIS. Wildlife Conservation Society (WCS) Canada takes this opportunity to: 1) introduce WCS Canada; 2) recommend a Joint Review Panel (JRP) for the Project, and 3) provide comments and recommendations on the Draft EIS Guidelines for the Project.

We are submitting our comments on the process associated with assessment of the Project within this letter with more detailed comments on the EIS guidelines attached in a table. We provide these comments 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 ([www.wcscanada.org](http://www.wcscanada.org)) was established in May 2004 as a Canadian non-government organization with a mission to conserve wildlife and wildlands by improving our understanding of and seeking solutions to critical problems that threaten key species and large wild ecosystems throughout Canada. WCS Canada generates knowledge through research and tools for conservation of the northern boreal's wide-ranging fish and wildlife species, ecosystems, and biodiversity. WCS Canada provides this information to Government and First Nations decision-makers to create policies and governance systems that support biodiversity conservation, sustainable use of biological resources and best practices for industrial development. Through our role on the Far North Science Advisory Panel to Ontario's Minister of Natural Resources (OMNR), WCS Canada contributed advice on approaches to regional-scale land-use planning in Ontario's northern boreal forest. Of particular relevance to the Project, was the recommendation by

the Far North Science Advisory Panel in its 2010 report<sup>1</sup> on the Ring of Fire. Specifically, the panel recommended that Ontario "immediately designate the Ring of Fire as a Priority Management Area with an interim sub-regional planning process." The rationale for this is rooted in the potential for irreversible impacts on terrestrial, aquatic, and social systems and the current lack of adequate planning tools and social institutions to address infrastructure, development activities, and climate change in the Ring of Fire from a broader regional perspective.

WCS Canada has reviewed the Project Description (April 2011) and the Project Addendum (July 2011) for the development of a significant multi-metal mine in a globally important peatland complex including new permanent infrastructure. We stress the most important points in this letter and provide more detailed comments in the table below. WCS Canada takes this opportunity to publically and respectfully stress the imperative for establishing a Joint Review Panel for this Project, coordinated and harmonized with the province of Ontario and with First Nations representation. This is due to the clear potential for significant environmental impacts and public concern, particularly Aboriginal people, for this Project, one of the two initial developments in the Ring of Fire. The JRP is more open opportunities for the public to engage and participate in this process, the evidence of the Proponent is tested under oath at hearings, and the panel members represent experts and non-partisan. In addition, we stress the importance of providing adequate participant funding to all affected First Nations be made to ensure meaningful consultation and accommodation obligations by the Crown and Ontario under section 35 of the Constitution Act, 1982. As a signatory to the United Nations Declaration on the Rights of Indigenous People (UNDRIP)<sup>2</sup>, the federal Government is also supposedly committed to processes the support free, prior and informed consent, participation in effective decision-making, negotiation for activities that affect communities, and respect and accommodation of views and traditional and indigenous knowledge. This is currently not happening in the Ring of Fire.

While we are highlighting the need for a JRP with respect to the Project, WCS Canada respectfully requests that the Minister of Environment seek agreement with Ontario to establish a regional strategic environmental assessment (R-SEA). The value of the resource under consideration whether nickel or chromite is based on both its depletion and a market that is not linked to local conditions. Market values for non-renewable resources fail to reflect the implicit environmental and cultural values in the region. As such, developments like this Project are unlikely to be sustainable. Sustainable development expectations and assumptions for possible futures that include these mines cannot be delivered by a process designed to mitigate adverse effects i.e., project-based environmental assessment. These specific developments are proceeding regardless of legislated provincial obligations on community and regional land use planning (*Far North Act, 2010*) which prohibit opening a mine without a land use plan. A R-SEA would place this Project in the appropriate context given the rate, scale, and intensity of industrial development, including Cliffs Chromite Project (registry no. [11-03-63927](#)), and could explicitly address the critical issue of sustainability in northern Ontario.

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<sup>1</sup> Ontario Far North Science Advisory Panel. 2010. *Science for a Changing Far North*. <http://www.mnr.gov.on.ca/en/Business/FarNorth/2ColumnSubPage/266512.html>

<sup>2</sup> <http://www.un.org/esa/socdev/unpfii/en/drip.html>

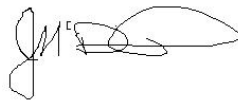
A process without a JRP ultimately relies on the EIS provided by the proponent to meet CEAA's stated goal of maintaining "environmental functions and integrity, considering system tolerance and resilience, and/or the human health of current or future generations." The Proponent must be required to provide both comprehensive information and evidence of critical analyses of the baseline conditions of the biological and social environment and the potential impacts of the Project. We have prepared our comments with this intent in mind. Our comments are presented in the attached table to facilitate your response.

In conclusion, we seek a stronger commitment to protecting the environment than we are currently witnessing by Federal and Provincial governments given the unprecedented scale, pace, and intensity of this Project and Cliffs Chromite Project in Ontario's Ring of Fire. We have significant and growing concerns about the lack of commitment to an independent Joint Review Panel for both this and the Cliffs Projects and the established inability of a separate EA process to address cumulative effects in a manner that addresses sustainability. Given the fact that both mines are novel in a unique and fragile ecological and social environment, we view the pursuit of a customary EA approach as inappropriate and potentially dangerous. We use this opportunity to highlight the imperative for regional strategic environmental assessment process, particularly given various on-going provincial processes around land use planning and would welcome the opportunity to discuss this specific request further.

Sincerely yours,



Cheryl Chetkiewicz, PhD



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: Honourable Peter Kent (via email [Minister@ec.gc.ca](mailto:Minister@ec.gc.ca))  
cc: Alex Blasko, Special Project Officer, ON MOE (via email [alex.blasko@ontario.ca](mailto:alex.blasko@ontario.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.

No.	EIS Section, Page No.	Comment	Recommendations
1		<p>Statements such as "where practical" and "as appropriate" are repeated throughout this document, with no guidance provided as to what or who will determine what is practical or appropriate.</p>	<p>Clarify who and what determines these efforts and who determines if the actions are suitable.</p> <p>We recommend NOT leaving it up to the Proponent.</p>
2		<p>Lack of valuation for ecosystem services in the EIS except within the ambiguous references to ecological integrity as predication for human health and economic growth.</p> <p>Ecosystem Services include:</p> <ul style="list-style-type: none"> <li>1) Provisioning ecosystem services - products that humans obtain from ecosystems, such as food, fuel, fiber, fresh water and genetic resources;</li> <li>2) Regulating services - benefits that humans obtain from natural regulation of ecosystem processes, including maintenance of air quality, climate regulation, erosion control, disease control and water purification; and</li> <li>3) Cultural services - the non-material benefits that humans obtain from ecosystems through spiritual enrichment and educational, recreational and aesthetic experiences.</li> </ul>	<p>We encourage CEAA to require inclusion of ecosystem services in EIS.</p>
3		<p>The PD on which the EIS is based ignores infrastructure options being developed by Cliffs Chromite Project.</p> <p>The Proponent has publicly presented on the various scenarios and options they pursued to arrive at the E-W route for the current infrastructure proposal. These should be clarified given the investment and impact of two major infrastructure projects (e.g., this one and Cliffs) in the same region.</p>	<p>EIS should direct Proponent to provide rationale for ignoring infrastructure options that coordinate with Cliffs Chromite Project.</p>

Eagles Nest is a massive magmatic sulphide (MMS). The PD describes a design production rate of 2,960 t/day of sulphides and the EIS directs the Proponent to address Acid Rock Drainage/Metal Leaching (ARD/ML) in various sections.

Both underground and open pit operations where significant amounts of sulphide are present in ore and waste rock can significantly lower the pH of ground water and surrounding surface waters. This is significant in the middle of a wetland/peatland complex that the Proponent describes as "challenging soil conditions". These soil conditions will only be further exacerbated by climate change predictions.

Temporary storage of waste rock on the surface seems highly risky in this environment.

EIS should direct Proponent to provide information on ARD/ML for similar mining operations in wetlands or peatlands.

4

Specific Comments:

The Project requires tremendous quantities of blasting compounds and explosives that will leave soluble residues (nitrate, ammonia) on the rock surfaces that can then enter the environment. Although the Proponent describes the use of emulsion based explosives and ANFO to reduce contamination of water, this aspect of operations is not adequately addressed in the EIS.

EIS should direct Proponent to describe in more detail the choice of blasting agents and explosives given water chemistry and show how their choices minimize water contamination.

An estimate of the amount of explosives that will be generated on-site would also be useful.

We acknowledge that the section on explosives is difficult to assess as non-experts but the PD offers inadequate information on the risks associated with Proponent choices for explosives and blasting agents, particularly the ANFO agents, in an alkaline wetland/peatland complex

5 1.2 Pg. 5

The Woodland Caribou Boreal population is listed as threatened and listed on Schedule 1 of SARA. The Minister of the Environment is responsible for developing a recovery strategy including the identification of critical habitat. It is unclear why Environment Canada is not listed as "may take action" under the Canadian Species At Risk Act (SARA)

Add Environment Canada

6 1.2 Pg. 5

7	1.2 Pg. 5	<p>After reviewing the Addendum, it is still not clear how Proponent arrives at 2,960 t/d. Given this is just 40 kg below regulation 16a; it would be helpful to better understand the derivation of this amount.</p>	<p>Clarify and include regulation 16a in EIS</p>
8	1.2 Pg. 5	<p>Given the stated intention of having a harmonized process for provincial and federal EA's, there should be a joint set of guidelines and a provincial terms of reference (ToR).</p> <p>There is precedent in Canada for jointly developed guidelines/ToR (e.g., Marathon, ON). There are known challenges for Project where these processes have been different (e.g., Taseko, BC). Any differences in approach or definitions should be resolved by deferring to the broader version or more precautionary of the two.</p>	<p>Clarify how Federal and Provincial EA process will be harmonized.</p> <p>Factors to be considered should include Ontario <i>Environmental Assessment Act</i> requirements in addition to those of the CEAA.</p>
9	1.2 Pg. 5	<p>Although the PD recognizes that Provincial legislation that affects this Project, the EIS does not.</p> <p>This is highly relevant given Government-led land use planning processes being carried out by ON under the <i>Far North Act (2010)</i>. There are both regional and community scale processes that are not addressed in this EIS and warrant immediate review in harmonization process</p>	<p>Harmonize EIS and ToR jointly to address current land use planning under Provincial legislation.</p>
10	2.2 Pg. 6	<p>The EIS stipulates that public participation requires clear understanding of the project.</p> <p>The source of public information is the PD and Addendum. Baseline reports on environmental research programs referenced in PD for baseline studies should be available to public on Major Projects Tracker and CEAA Registry.</p>	<p>Provide information from baseline studies for public and 3rd party review.</p>

<p>11 2.2 Pg. 6</p>	<p>The EIS stipulates that public participation requires clear understanding of the project. The CEAA website and Major Projects Tracker are useful tools for public access, but may not be readily available or useful for communities tasked with commenting and reviewing these documents.</p>	<p>Consideration should be given to providing documents electronically and in print including translation within satellite registries in the region where this Project is being assessed as well as the NAN office and the Matawa and Mushkegowuk Tribal Councils.</p>
<p>Baseline studies for environmental and ATK in the Project.</p>		
<p>12 2.2 Pg. 6</p>	<p>We feel that the current process for obtaining baseline data, namely consultants, on pre-Project conditions suffers from severe inherent conflicts of interest. Consultants are paid and directed by the Project proponent and their income is dependent on their client so all data are generated by consultants have a financial stake in the regulatory outcome. These data are not independent of the Proponent and are not viewed as such by the public.</p>	<p>Provide information from baseline studies for public and 3rd party and independent scientific review.</p> <p>ATK studies, particularly methodologies, should also be available for independent review by qualified social scientists and Aboriginal scholars.</p> <p>We recommend a Joint Review Panel to address this concern.</p>
<p>It is unclear how the proposed timeline for the project schedule can be met with such limited review of environmental and social values.</p>		
<p>13 2.2 Pg. 6</p>	<p>Description of aquatics as described in PD seems too limited in spatial and temporal scale for critical evaluation of impacts. The studies are short in duration, are not systematic, and do not include published information or consultation with other researchers. They are also incomplete. For example, the PD lacks reference to lake sturgeon and their baseline study could not address lake sturgeon.</p>	<p>Clarify how Proponent's baseline studies are adequate by current scientific standards.</p> <p>Clarify how CEAA and RA s will assess compliance based on Proponents comments in Addendum.</p> <p>How will species at risk data be addressed through monitoring?</p>



14	2.2 Pg. 6	<p>The EIS stipulates that public participation requires clear understanding of the project. The only source of public information is the PD and Addendum.</p> <p>Archaeological modeling described in PD requires ground truthing and work with First Nations communities to determine cultural values (not just burial sites or evidence of graves) for the Project site. The PD provides inadequate information to assess the EIS guidelines in this regard.</p>	<p>Clarify how Proponent's archaeological modeling will be ground truthed. Clarify how CEAA and RA s will assess compliance based on Proponents comments in Addendum.</p> <p>How will archaeological evidence be addressed? It is unclear how the proposed timeline for the project schedule can be met with such limited review of environmental and social values.</p>
15	2.2 Pg. 6	<p>There is a lack of information on the biodiversity and cultural values of the eskers that will be mined to supply aggregate for infrastructure for the Project.</p>	<p>Clarify and provide baseline data on cultural and biodiversity assessment for eskers that will be destroyed through infrastructure development proposed in this Project.</p> <p>It is unclear how the aggressive proposed timeline for the project schedule can be met with such limited review of environmental and social values.</p>
16	2.5 Pg. 8	<p>The EIS offers little guidance for addressing sustainability.</p> <p>Going through a project-based EA does not address sustainability given that the life of the mine is only 11 years according to the PD. The resource is not renewable and the value of the resource is not dependent on any local economic conditions. The use of the term sustainability is highly misleading in EA.</p>	<p>EIS should direct Proponent to address sustainability more explicitly with environmental and social costs based on best and worst case economic scenarios for nickel using Project outputs of ~ 3,000 t/day for the next 11 years.</p> <p>These scenarios should be based on market requirements, social costs (including Aboriginal and Treaty rights), and climate change.</p> <p>Address the distribution of costs and benefits under these scenarios.</p>
17	2.5 Pg. 8	<p>The EIS offers any little guidance for addressing sustainability.</p>	<p>An economic viability analysis should be conducted.</p>
18	2.5 Pg. 8	<p>It is unclear how this EIS addresses sustainability "predicated on the maintenance of ecological integrity". Neither the PD nor the EIS define or address ecological integrity.</p>	<p>EIS should include a sustainability analysis in each section that addresses ecological integrity.</p> <p>CEAA should provide more explicit guidance.</p>

19	2.6 Pg. 9	<p>We agree with the use of the precautionary principle given the novel development situated in a globally important peatland complex however the attention to climate change and the dynamic nature of boreal ecosystems in the EIS guidelines is inadequate.</p> <p>The reference in the EIS titled, <i>Incorporating Climate Change Considerations in Environmental Assessment: General Guidance for Practitioners (CEAA 2003)</i> is outdated relative to climate change science.</p>	<p>We recommend using the climate change predictions for northern Ontario contained in:</p> <ul style="list-style-type: none"> <li>• Ontario Far North Science Advisory Panel. 2010. Science for a Changing Far North <a href="http://www.mnr.gov.on.ca/en/Business/FarNorth/2ColumnSubPage/266512.html">http://www.mnr.gov.on.ca/en/Business/FarNorth/2ColumnSubPage/266512.html</a></li> <li>• Ensemble scenarios for future climate change for Canada prepared by the Climate Impacts and Adaptation Research Division (CIARD), Environment Canada <a href="http://www.cccsn.ca/index-e.html">http://www.cccsn.ca/index-e.html</a></li> </ul>
20	2.6 Pg. 9	<p>Mining is subject to a number of climatic risks that are inadequately addressed in this EIS.</p> <p>This is particularly relevant in this Project given the location in a wetland/peatland with local, regional and international ecosystem services, the current reliance on winter road infrastructure to minimize environmental impacts, lack of acknowledgement of regulatory risks for cap and trade systems in Ontario associated with carbon and no attention to climate change in the closure plan.</p>	<p>Require the development of future exposure scenarios for transportation infrastructure, tailings, drainage, and water balance at the site.</p> <p>Explicitly consider the impacts of climate change in the closure plan (see decommissioning of Quirke and Panel Uranium Mines in Elliot Lake, ON).</p> <p>Use regional predictions for climate change to assess engineering designs.</p> <p>See also report in 2009 on Climate Change and Mining: Opportunities for Adaptation. <a href="http://www.davidsuzuki.org/publications/reports/2009/climate-change-and-canadian-mining-opportunities-for-adaptation/">http://www.davidsuzuki.org/publications/reports/2009/climate-change-and-canadian-mining-opportunities-for-adaptation/</a></p>
21	3.3 Pg. 12	<p>It is unclear why a stand-alone section on cumulative effects assessment is a consideration given the goals of EA.</p>	<p>Cumulative effects assessment should be required.</p>

22	4.1 Pg. 13	<p>There no mention of Corporate Social Responsibility (CSR) in this section or under Sustainable Development above.</p> <p>Industry Canada promotes CSR principles and practices to support operational efficiency gains; improve risk management; favour relations with the investment community and improve access to capital; enhanced employee relations; stronger relationships with communities and an enhanced license to operate; and improved reputation and branding.</p> <p>CSR closely resembles the business pursuit of sustainable development and the triple bottom line according to Industry Canada.</p>	<p>Require the Proponent to address Corporate Social Responsibility (CSR) principles explicitly including any company policies that address CSR.</p> <p>Consider addressing the International Organization for Standardization standard on social responsibility--ISO SR26000.</p>
23	4.3 Pg. 13 & 14	<p>This section lists the features that may be included.</p>	<p>The information should be required. Any land use plans, past or present, should also be identified.</p>
24	4.3 Pg. 13 & 14	<p>The environmental significance and value of the geographical setting in which the project will take place and the surrounding area. CEAA and the EIS provide no guidance on this analysis.</p>	<p>EIS should be specific on what is meant by "value" in this context.</p> <p>This analysis should be a priority in this list and be required. This information should also be included in section 5.2 (Project Setting).</p>
25	4.5 Pg. 14	<p>The Proponent did not address the Regional Land Use Strategy required by the <i>Far North Act (2010)</i> in their PD nor was this addressed in the Addendum based on Federal RA questions. This implies that Proponent may not be aware of the regional implications for this Project under Provincial legislation in addition to any community land use plans.</p>	<p>EIS should be more specific in directing the Proponent to address current Provincial legislation with implications for land use at regional and community scales across the Project scope, including the <i>Far North Act (2010)</i> and the <i>Green Energy Act (2009)</i>.</p>
26	5.2 Pg. 15	<p>List additional information on maps.</p>	<p>EIS should include current land uses, areas where mineral exploration is taking place, and proposed road networks must be explicitly included. Traditional territories given <b>comment 30</b> should be addressed.</p>

27	5.3 Pg. 16	Identification of high risk of failure mine and infrastructure components on post-closure.	Risk analysis for monitoring and compensation should explicitly require assessment of mine structures and infrastructure under climate change scenarios, particularly post-closure.
28	6.2 Pg. 18	Point 10.	Clarify in EIS if this is renewable resource needs related to the Project or needs of the social and environmental processes in which it will be embedded.
29	6.2 Pg. 18	It is unclear why benefits to Aboriginal people are not included in this list.	EIS should include benefits of the Project to Aboriginal peoples.
30	6.3 Pg. 18	<p>Aboriginal traditional territories should be defined by First Nations communities to ensure adequate scoping for EA. Research on this issue with the Victor Diamond Mine EA suggested the scoping process was based on two erroneous assumptions: that the registered trapline system was the accepted system of land use/occupation in northern Ontario, and that land use/occupancy was based on the Treaty-imposed reserve system (not the family-based traditional lands system).</p> <p>Many First Nations have raised concerns about the limitations of the trapline registry as the sole basis of determining which First Nations may be affected by a project. First Nations also assert that Treaty harvesting rights were never expressly limited to the geographic area defined by the boundaries described by treaties. They assert that the treaties protected their rights to hunt fish and trap throughout all of their traditional territories, irrespective.</p>	<p>EIS should clearly describe the methods and approach used to determine traditional territories and the First Nations affected by the Project.</p> <p>We recommend the Proponent and their contractors responsible for ATK and traditional land use studies go beyond trapline based territorial maps and the geographic boundaries of treaties to consider oral history; knowledge of external boundaries; place names; genealogical information; direct experience on the land and the written records of encounters with early explorers, fur traders, government representatives, ethnologists, and other observers in the area. This approach could minimize the risk of project delays and costly and protracted litigation.</p> <p>We also recommend <i>Tsuji et al. 2011. Getting back to basics: the Victor Diamond Mine environmental assessment scoping process and the issue of family-based traditional lands versus registered traplines. Impact Assessment and Project Appraisal, 29(1) 37-47.</i></p>

31	6.3.1 Pg. 19	Determination of a VEC.	<p>We recommend that the EIS create a VEC for the species of plants and animals that Aboriginal people have hunted, fished, trapped, gathered and cultivated for subsistence. This would be more explicit than present where they are addressed as country food in vegetation and less explicitly as "resources for traditional purposes".</p> <p>The EIS should direct the Proponent to identify potential adverse effects of the Project on this VEC, including the ability of future generations of Aboriginal people to pursue these traditional subsistence activities.</p>
32	6.3.2 Pg. 20	Current PD spatial scope ignores downstream effects.	<p>The spatial boundaries of the EA must be large enough to allow appropriate consideration of downstream impacts. This is also relevant given Cliffs Project in watershed.</p>
33	6.3.3 Pg. 20	PD suggests a mine life of 11 years.	<p>Temporal boundaries based on this mine life are inadequate. EIS should promote a scope beyond the closure period.</p>
34	9 Pg. 25	<p>This section must include clear statements about the uncertainties regarding the knowledge of the baseline environment for this Project.</p> <p>The Far North Science Advisory Panel Report highlights many gaps in the scientific knowledge of social-ecological systems in the region. In addition, current data available to the public from the Proponent is also inadequate. For example, aquatic data were limited to one river (Muketei River) and sampling was poorly timed. The lack of information has implications for regulations.</p> <p>Acknowledgement of uncertainty in both the limited data is central to evaluating risk in scenarios.</p>	<p>Clarify how and when PD will be revised for public and Aboriginal community review.</p> <p>How do these revisions affect timelines? It is unclear how the aggressive proposed timeline for the Project schedule can be met with such limited review of environmental and social values.</p>

35	9 Pg. 25	Exploration activities have likely impacted the site already.	Clarify and describe what, if any, assessments, permits, or inspections were conducted by Provincial agencies during exploration phase.
36	9.1. Pg. 25	Proponent needs to take an "ecosystem approach".	EIS and CEAA needs to provide more clarity and guidance to Proponent on what is meant by an "ecosystem approach" given above limitations in 6.3.2. and 6.3.3 on spatial and temporal scale.
37	9.1. Pg. 26	Proponent needs to consider resilience.	EIS and CEAA needs to provide more clarity and guidance to Proponent on what is meant by resilience, particularly under climate change. Why does this concept not apply to social systems embedded in the same environment i.e., First Nations communities.
38	9.1. Pg. 26	Proponent needs to map habitat.	EIS should be clearer on the legal definition and designation of critical habitat for species-at-risk.
39	9.1. Pg. 26	Proponent needs to map habitat at regional scale.	EIS and CEAA should define what is meant by "regional scale".
			EIS should define the scope of "regional study area".
			EIS should require the Proponent provide an appendix and tables that summarize the technical details for all of the sources of surface water (not just for drinking water) sampled.
40	9.1.4 Pg. 28	Proponent must describe surface water quality and hydrology at the site, local and regional study areas.	Technical details should be summarized along with tests performed and test details.
			EIS should define the scope of "regional study area".
41	9.1.4 Pg. 29	Proponent must describe ground water quality and quantity at site, local and regional study areas.	At present it is unclear whether this would include aquifers in non-ore zones and PD only addresses ground water near facilities. EIS should direct ground water quality testing in non-ore zones.

EIS should require the Proponent provide an appendix and tables that summarize the technical details for all of the sources ground water information used to generate the conclusions. These would identify both by general category and by specific site (UTM):

- the construction details of any wells, etc. including total depths, diameters, casing and perforation information as well as details on methods to develop any wells,
- the estimated or measured yields of springs, etc.
- tabular summaries, by specific well, etc., that summarize any specific hydrogeologic testing that was performed and the test details (test duration, pumping rates, etc.).

Recommendation of Portt et al. (2008). Portt et al. (2008) is a protocol that was developed for Great Lakes environments with multiple species at risk and degraded habitats and populations. It cannot be simply applied to intact aquatic systems where species may not be listed at risk but remain conservation concerns.

Portt et al. (2008) is missing some important components such as quantitative guidance on effort, which is central to the survey of rare species.

42 9.1.5 Pg. 29

EIS should explicitly refer to lake sturgeon and ciscoes, the primary freshwater species of conservation concern in the region.

The Proponent should address the limitations of Portt et al. (2008).

Lack of reference to globally significant peatlands.

Peatlands have intrinsic social and ecological value. The Far North Science Advisory Panel Report documents that peatlands in the Far North store more carbon than all the other natural ecosystems of Ontario combined. There is growing documentation of the role that peatlands play in cooling the global climate, and about a tenth of the cooling benefit of global peatlands comes from the Far North of Ontario. The Report dedicates an entire section to Peatlands.

43 9.1.7 Pg. 31.

EIS must include Peatlands.

44	9.1.8 Pg. 32	Species at Risk.	EIS should direct Proponent to consult Provincial recovery and management plans and recovery team members and other experts on particular species at risk.
45	9.2 Pg. 33	The requirements regarding which socio-economic factors must be included that appropriately measure baseline conditions are inadequate.	EIS should include or direct Proponent to include indicators and direct measures of sustainability.
46	9.4 Pg. 35	Physical and cultural heritage resources. Sacred sites are the oldest form of protected areas and many of them are very important biodiversity reservoirs.	Anthropological and sacred sites where communities have identified that development cannot occur must be addressed.  Where these sites cannot be made public based on First Nations traditions and sensitivities, see guidelines and best practices at <a href="http://www.iucn.org/about/union/commissions/wcpa/wcpa_puball/wcpa_bpg/index.cfm?uNewsID=2164">http://www.iucn.org/about/union/commissions/wcpa/wcpa_puball/wcpa_bpg/index.cfm?uNewsID=2164</a>
47	10 Pg. 35	Nature of Environmental Effects Assessment.	EIS should direct Proponent to review and analyze environment impact statements and results from monitoring programs and/or after-project impact assessments from mining projects undertaken in similar environments.  These are mentioned in PD. This will enhance the Proponent's understanding and awareness of likely impacts and means of addressing them.
48	10.2.3.1 Pg. 44	Scope of assessment.	EIS should direct Proponent to address changes in water flow due to <u>infrastructure</u> to mine site and not just the mine site changes.
49	10.2.3.1 Pg. 44	Scope of assessment.	EIS should direct Proponent to include water balance scenarios based on climate change scenarios recommended in comment 19.
50	10.2.6 Pg. 52	Scope of assessment.	EIS must include Peatlands (see comment 43).





EIS should also direct Proponent to provide all the data in an appendix organized by:

- rock lithology
- whether samples are considered ore or waste rock
- provide n, max, min, range, mean, median, std. dev.

51 10.2.3.2 Pg. 47 ARD/ML testing and reporting for review by public.



The EIS in this section directs the Proponent to provide an appendix of data. This approach is necessary in other sections of the EIS as well.

The data need to be organized in a manner that promotes review by either the public or the regulators. For example, surface water flow data should be organized by monitoring station and date, and then integrated with the related water quality data.

Water quality data need to be organized in tabular form so that all data from any one monitoring station can be readily compared by date. Such tables should present dissolved [filtered] and total [unfiltered] water quality data side by side for comparisons by date.

Water quality data needs to be statistically summarized for all monitoring stations to show: n, min, max, median and mean. These data permit the public to know what the surface and ground water quality was prior to commencement of the operations.

52 10.2.3.2 Pg. 47 Data presentation in EIS for review by public.



The EIS should include specific information on the sampling and handling methods employed for water quality monitoring given the remoteness of the Project.

53 10.4 Pg. 56 Methods for monitoring water quality.

