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November 16, 2013

Via e-mail: mark.baker@norontresources.com

RE: Noront Resources Ltd. DRAFT Baseline Aquatic Environment Report

Dear Mark,

Thank you for your e-mail on September 25, 2013 enabling WCS Canada staff to review the report in advance of the completion of Noront's draft EIS/EA. WCS Canada fishery biologists, Drs. Jenni McDermid and Mohammed Alshamli (Appendix 1) provided the following review and comments on the report. We suggest that addressing our recommendations below will strengthen the final documents Noront submits.

1. Please clarify discrepancies in Noront's sampling methods against accepted Ontario protocols for fish and benthic communities.

We noted that the methods described for sampling fish differ from established provincial methodology. For example, although Ontario's Broad-scale Fish Community Monitoring (BsM) methods (e.g., Sandstrom et al. 2010) are referenced, broad-scale nets specified in this protocol were not used (pg. 24) nor were the nets used deployed following BsM protocols. Similarly, it is unclear why Ontario's Benthos Biomonitoring Network protocols were not consulted or followed during the collection of benthic materials¹.

2. Improve upstream and downstream sampling and consistency of data collection up- and down-stream of the mine sites.

Sampling along the proposed road corridor (X-series) seems appropriate although we noted sampling in places is separated by 9-15 km. This suggests that the data series have large gaps which include waterbodies where the proposed road will have impacts. The report should clarify why these sites were not sampled. Sampling upstream near the mine appears to be lacking and incomplete (EP- and MR- series). We suggest more up- and downstream sampling locations with respect to the mine site should be included for control and reference (e.g., upstream from mine). To provide relevant baseline data, downstream sampling should include waterbodies in

¹ <http://www.saugeenconservation.com/download/benthos/2009/OBBN%20Protocol%20Manual.pdf>

the Attawapiskat watershed north and east of the EP- and MR- sites and within the Ekwan watershed (see below).

It is unclear why the upstream site MR-U sampled benthos only while mine site and downstream sampling sites including fish and sediments or fish alone. We suggest this inconsistency will make interpretation and comparison of before- and after-conditions and impacts difficult to interpret. In addition, sampling only fish downstream of mines, also makes it difficult to detect changes from mines in a timely manner compared to sampling water and sediment. Please confirm that water quality and sediment testing are also being addressed at these sites. Finally, Site EP-15 was sampled for fish, sediment, and substrate but not benthos. Overall, we find these discrepancies in systematic sampling to be problematic from an assessment and monitoring perspective.

3. Address regional impacts associated with proposed road location.

The proposed road corridor follows the alignment for the community winter road. However, an all-weather road creates significantly more impact than the current winter road. Importantly, the proposed road crosses three secondary watersheds including the headwaters of both the Winisk and the Ekwan and five tertiary watersheds (Figure 1.9, pg 13 and others). Alternative scenarios for road placement that more adequately consider the impact on watersheds should be considered. For examples, alignments that remain within one watershed e.g., the Attawapiskat.

The proposed road alignment also comes within 500-700 m of the Otonkwin-Attawapiskat Provincial waterway park in places. We suggest that cumulative effects on the aquatics will need to be considered with respect to these designations, specifically the development of roads proximate to protected areas.

4. Discrepancies and errors in material.

Koper Lake (Table 5.5, page 63). WCS Canada staff sampled Koper Lake during the summer of 2013 using a rapid bathymetric assessment and found a maximum depth of 4.6m in the south central portion of the lake. The current report indicates a maximum depth of 1.10m for Koper Lake. This difference of over 3 m is a concern. Please clarify.

Appendix A, page 1, Table A.1. Latitude and longitude coordinates for the Muketei River in the Attawapiskat (East) Watershed do not match up with the location of the UTM coordinates and the lat/long coordinates are not on the Muketei River. The latitude and longitude coordinates should be 52.824135, -86.254136 (not 52.834061, -86.236417).

Section 2.4.1, Page 17, Table 2.1. The UTM Northing coordinate is incorrect for Sample Station EP-15 on Tributary 1. It looks like the northing coordinate was copied from the cell above. The UTM Northing should be 5840002 to correspond with the latitude and longitude coordinates.

We are grateful for the opportunity to review these documents and look forward to receiving notification on the remaining documents. I look forward to attending the Open House on November 20 in Thunder Bay.

Sincerely yours,

A handwritten signature in blue ink, appearing to read "Cheryl Chetkiewicz".

Cheryl Chetkiewicz, PhD

Appendix 1.

Dr. Jenni McDermid is a Fish Conservation Research Scientist with WCS Canada conducting research to address impacts of increased access, mining activities, hydroelectric development, and climate change on freshwater fish.

Dr. Mohammed Alshamlih is a Postdoctoral Research Fellow with WCS Canada studying the impacts and consequences of smallmouth bass invasion, an invasive species in Ontario's Far North watersheds, through human dispersal and climate change.