11 July 2005

Mr. Brett Maracle
Project Assessment Analyst
Canadian Environmental Assessment Agency
160 Elgin Street, 22nd Floor
Ottawa, ON K1A 0H3

Re: Proposed Victor Diamond Project Comprehensive Study Report

Dear Mr. Maracle,

Thank you for the opportunity to provide comments on the Victor Project Comprehensive Study Report (CSR), which I am submitting both on behalf of Wildlife Conservation Society Canada (WCS Canada), conservation NGO, and in my capacity as a field scientist specialising in wildlife and landscape ecology.

WCS Canada was organized in May 2004 as a Canadian nonprofit corporation with the mission to save wildlife and wildlands by improving our understanding of and seeking solutions to critical problems that threaten key species and large wild ecosystems throughout Canada. We implement and support comprehensive field studies that gather information on wildlife needs and then seek to resolve key conservation problems by working with a broad array of stakeholders, including local community members, conservation groups, regulatory agencies, and commercial interests. As both the Director and field scientist for WCS Canada, my particular expertise is in forest carnivore ecology, in which I have established a solid publication record. Particularly germane to the Victor Project, I am a co-principal investigator of the Ontario Wolverine Project commenced in 2002 (in partnership with MNR and The Wolverine Foundation) – the first ecological study of wolverines in lowland boreal forest and in Ontario. In 2003 and 2004, we conducted extensive aerial surveys of northern Ontario, covering most of the Hudson and James Bay Lowlands, including the Victor Project Study Area in March 2004.

WCS CANADA
720 SPADINA AVENUE, SUITE 600
TORONTO, ONTARIO M5S 2T9 CANADA

PHONE: (CAN) 416 850 9038 X 22
FAX: 416 850 9040
JRAY@WCS.ORG
WWW.WCS.ORG

It is in this capacity, that I, in consultation with other WCS Canada staff, respectfully outline several major concerns we have with the Victor Project CSR and project at large. In turn, we offer some recommendations for addressing these concerns, chief among them that this project be referred to a review panel, based on:

1. Lack of proper consideration of Species At Risk;
2. Lack of clear reasoning regarding conclusions reached by the Responsible Authorities (RAs);
3. Lack of baseline ecological data from the Victor Project Study Area;
4. Importance of clarifying follow-up activities;
5. Precedence set by this major development effort in an as-yet undeveloped region.

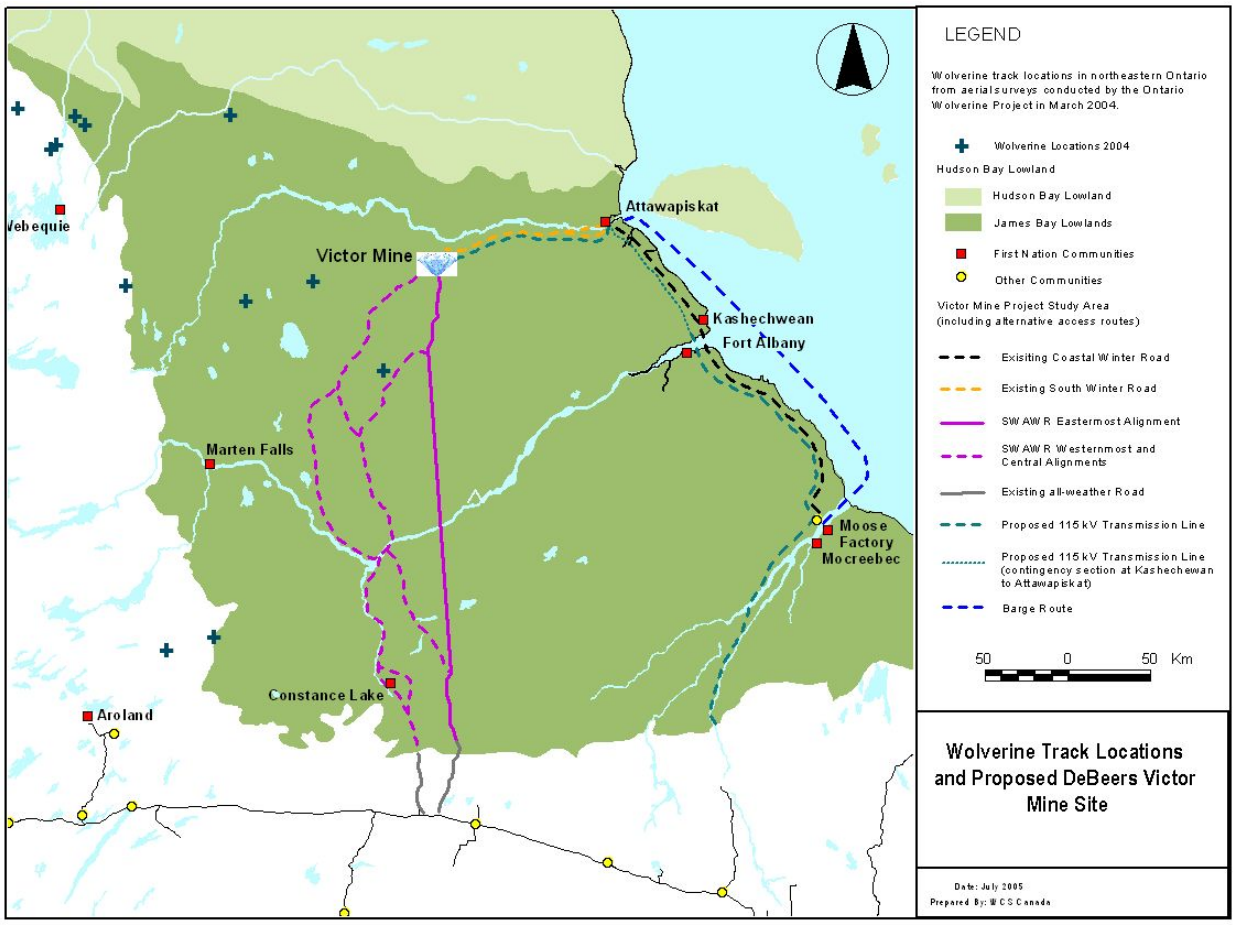
Our comments will be limited primarily to our particular expertise within the scope of CSR, namely wildlife and landscape ecology, and will include comments on the VDP Caribou Survey Methodology (letter from AMEC to Bruce Mighton, MNR, dated March 30, 2005).

1. Lack of Proper Consideration of Species-At-Risk.

The section in the CSR discussing potential impacts to species-at-risk does not include up-to-date information on two species: wolverine and lake sturgeon.

Wolverines are simply stated in the CSR as unlikely to be present in the study area, and by extension not likely to be impacted by project activities. This conclusion, however, has not incorporated the findings from aerial surveys conducted by the Ontario Wolverine Project in March 2004 whereby several sets of wolverine tracks were found within or near to the defined Victor Project study area (see map on next page). These sightings may represent the eastern frontier of range expansion and recovery of formerly occupied range in northeastern Ontario.

Given this set of circumstances, it will be of interest to the RAs as to whether these wolverines are from the "eastern" or "western" wolverine populations, which have separate COSEWIC designations (eastern is endangered and western is special concern). The separation of wolverines in Canada into two separate populations is merely an artifact of their range recession. As recently as the 1950s, wolverine distribution was contiguous across Canada; wolverines from Québec and Labrador are possibly extirpated at present. Wolverines were harvested by Moosenee trappers up until the 1950s. Recovery of the eastern wolverine population could be facilitated by immigrants from Ontario, as indicated in the recently published COSEWIC *National Recovery Plan for the Wolverine (Gulo gulo) [Eastern Population]* (National Recovery Plan No. 26, February 2005). This possibility is made more likely by the recent eastern-ward range recovery of this species within Ontario documented by the Ontario Wolverine Project.



The narrative in the CSR at it relates to wolverine is therefore misleading and the Victor Mine project area must be considered as an area of potential recovery for both eastern and western wolverine populations. Wolverine is also listed as threatened by COSSARO in Ontario. It is our understanding that the provincial wolverine recovery team is currently being assembled and will begin to meet after the summer. Plans to develop the Victor Mine area should be coordinated with this team whose responsibility it will be to develop a recovery strategy.

It should also be noted that lake sturgeon were recently listed by COSEWIC in its May meeting and should therefore receive consideration in this environmental assessment.

2. Lack of Clear Reasoning regarding Conclusions reached by the RAs

The role of the environmental assessment as an objective means by which to evaluate potential environmental effects of a development project should by no means be solely reliant on proponent responses to expressed outside concerns, and should include evidence of independent research, including proper consultation with outside experts. Yet, in almost all cases where significant concerns have been expressed by reviewers of the project, the RAs demonstrate little or no evidence of how they reached their own

conclusions beyond presentation of the proponent's response. This is particularly evident to us in Sections 3 (Evaluation of Alternatives) and 6 (Environmental Effects Analysis) where environmental effects were rated.

In Section 3, a variety of alternative means of carrying out the project are detailed. In most cases, the relative costs and benefits of alternatives are laid out fairly comprehensively regarding the 4-5 criteria. While both preferred and unacceptable ratings are often accompanied by explanations for the ratings, more often than not "acceptable" ratings receive none whatsoever. This is particularly problematic for evaluating effects to the natural environment, because there is no clarity for how acceptance (defined as "minimi[zing] adverse effects to the natural environment with mitigation," 3-2) is achieved. In several instances even though drawbacks for an alternative are discussed, it is still deemed acceptable by the RAs without explanation.

Because "an alternative is…rejected if it attains an unacceptable rating for any single performance objective" (3-3), the RAs have a particular responsibility to carefully provide support for the threshold between acceptable and unacceptable impact. In most cases, however, consultation with experts appears to have been limited to the proponent itself and government position follows as a one sentence "agreement" with the proponent. There are many examples of this in section 3, the most notable of which include work scheduling (3-6), plant wastewater management (3-20), above-grade storage facility (3-22), aggregate sources (3-28), and above-grade landfill (3-36). Such ambiguity is, in our view, indicative of a lack of due diligence on the part of the RAs in responding to major concerns regarding this project.

In Section 6 (Environmental Effects Analysis), a similar syndrome was apparent in providing ratings of Level 1, 2, and 3 which in turn assess whether or not the effect in question is "significant." In many cases, comments and concerns expressed by reviewers were various and extensive. Yet, the RAs did little beyond agree with the proponent's responses to these comments, often responding with a one-sentence reply. In our view, the most disquieting example of this is the RAs' response to the concern expressed by many reviewers regarding the potential for mining activities to dewater large areas of muskeg, leaving a 2,575 km^2 "cone of depression" (6-65). It appears from the CSR that rather than consulting outside experts on their own accord (e.g., geologists and caribou experts), provincial and federal representatives were brought on-site with further consultations with the proponents. The conclusions of the RAs are dispatched in two sentences (6-65).

In some cases, a lack of data or consultation with experts results in erroneous statements. One important example of this is the overemphasis on riverine habitats as prime wildlife habitats in the Victor Study Area, and the relative dismissal of more extensive fens and bogs. For example, in several spots, the CSR states that most furbearers tend to be concentrated or are most productive along watercourses (1-4, 5-20,

6-95, 6-150), and accordingly, their habitats "will not be meaningfully impacted by project development" (6-150). No actual data or references are provided for such statements in either the CSR or accompanying technical reports (e.g., AMEC Environmental Baseline Study). Indeed, furbearer tracking studies are not expected to be initiated by the proponent until 2005. In any case, this statement runs contrary to data collected by Ontario Wolverine Project aerial surveys during winter 2004 where furbearer sign (particularly marten) was equally or more abundant within tamarack swamps and bog habitats as along rivers and creeks. Our concern is that such assumptions brought forward by the proponent may enhance the comfort level of the RAs in downplaying bogs and fens as important habitat or in evaluating the impacts of the Victor Project to wildlife habitat in general. While we would concur from our work in the area that the James Bay Lowlands represent lower productivity wildlife habitats compared to boreal forests, a notable lack of general information on wildlife habitat utilization and movements within this region makes it that much more difficult to predict impacts to resident biota (see below).

3. Lack of baseline ecological data from the Victor Project Study Area

Given the profound lack of baseline ecological data for Ontario north of the Area of Undertaking, we are very concerned by the confidence with which the RAs accept assurances of acceptable impact by the proponent. Due to the remoteness of the region, low human population density, relative lack of MNR capacity to cover an enormous landbase, and lack of natural resource interest until now, next to no surveys, or ecological studies, let alone monitoring, has been conducted on any wildlife species (including moose and caribou) or other ecological values in this region. MNR scientists themselves have made this point in responding to the Victor Project plans (as noted in the CSR). While the proponents themselves have done considerable work in gathering some of these data, it is important for the RAs to acknowledge that our knowledge of baseline ecological conditions (e.g., caribou populations and other species at risk) for this region is simply not robust enough against which to monitor changes. This means that in many cases it will simply not be possible to predict environmental effects of this project, which has relevance both for this impact assessment and for the design of monitoring programs (see below).

4. The critical importance of adequate follow-up to the Environmental Assessment Process

We wish to highlight two major concerns regarding follow-up to the environmental assessment process should this project be approved: the process for evaluating alternative access routes and the design of effective monitoring programmes.

a) Process for evaluating alternative access routes

The scope of the project for the purpose of the environmental assessment is clearly stated to "include the construction, operation, modification, decommissioning, closure or other undertaking in relation to …… [a]ccess roads, including winter roads from Attawapiskat to the mine site, winter road from Moosonee to Attawapiskat, the west winter road and any new access roads to be constructed within the community of Attawapiskat." (1-14). We applaud the proponent's withdrawal from consideration of the "southwest alternative winter road" (SWAWR) based on environmental and socio-economic concerns. However, we strenuously question why the SWAWR is still included in the project (but not the environmental assessment) as an alternative route (1-15, 16), given the proponent's stated intention to bring construction materials (and not fuel) into Attawapiskat by barge in the summer for transport to the Victor site the following winter (2-25) should the coastal winter road become unserviceable. We urge the RAs to provide details to the public under what circumstances and following what process the SWAWR alternative might fall under consideration as an access route to the Victor Mine in the future.

b) Design of effective monitoring programmes

In the CSR, the RAs state: "If any unforeseen adverse effects arise during the life of the project, measures will be taken to correct these effects and prevent them from occurring again in the future" (PLS-7). Living up to this promise relies on robust monitoring programmes that are designed to effectively measure impacts that might be incurred by development activities. Monitoring activities, as outlined in section 8, are still alarmingly vague, displaying few direct links between data gathering protocols and the various potential impacts. The CSR makes reference to a few documents that provide more details on monitoring methodology, including the VDP Caribou Survey Methodology (March 2005). Here we provide our comments as an illustration of the overall concerns we have about monitoring the impacts of this significant development project as it unfolds in the landscape:

i) <u>The purpose of the work</u>. Aside from a vague statement on p. 6 ("to determine whether there are impacts..."), no overall purpose or objective of the caribou survey work is provided. Without a clear purpose for the work, up front, and some clear objectives or hypotheses, then the value and utility of all the detailed data gathering efforts cannot be assessed.

ii) <u>Project Design</u>. While much detail about methods has been provided, there is virtually no information about design, except with regard to spatial scale. There is no explicit linkage of the data gathering protocols with the various potential impacts listed in the Introduction. There should be a clear link (through a number of stated Objectives) between the potential impact, and the field and analytical technique(s) that will be used to make inference about the impact. Doing this would make it clear that

there is no solid opportunity to make strong inference from the data gathered, without recourse to follow-up sampling a number of years in the future.

iii) Can this project truly evaluate impacts? An ability to satisfy the apparent purpose (i.e. "to determine impacts") depends on a Before-After Control-Impact assessment. This ideal design cannot be achieved here because the caribou appear to be one population, all of which has potential treatment (impact) effects. So, the alternative is to acquire Before-After data, but there is no discussion in this document of whether or how that might be done. In fact the time-line for the field work is not clearly laid out, and it appears that most of the work may be accomplished only within one year. One would therefore conclude that the design does not include real Before-After assessments, but just an assessment at one point in time (the current year). This is confounded by the fact that the winter road already exists, whereas the mine development does not, so part of the potential impact is already in effect.

To have any credence as an "impact assessment" this document must lay out what can be achieved with the current design, which appears at present to be a single temporal assessment of some information on caribou demography and behavioral ecology taken largely, but not entirely, before the potential impacts of the mine. For this information to have value in assessing impact it cannot stand alone; it must be followed up by some repeated measures a number of years hence, which are not mentioned here. The main reason for this is the effects of any of the listed potential impacts in long-lived species such as caribou would take a number of years to be seen in demographic and behavioural responses that are consistent and marked enough to show trend through the statistical noise of other ongoing effects.

iv) Sample size issues. A sample of ten animals may be too small to make robust conclusions, e.g., with respect to habitat selection, or geographic variability in the mortality impacts of the road. It is not clear how the females are chosen for collaring. It would be best to sample them from as far-reaching points as possible so as to increase the chances that the data will allow estimates of survival (mortality being one of the most dramatic potential impacts of the mine) in at least two zones (distant from development/road, and close to development/road).

v) Hunter Survey Data is a crucial piece of the impact assessment, as the biggest potential impact of the development is likely to be hunting mortality, and/or changing predation mortality. This will also be the most challenging data gathering exercise, and will rely on level of trust between proponent and community residents, among other things. We urge the RAs to monitor progress on this front.

vi) Climate / Weather. The document mentions the potential effect of snow depth and morphology, but does not lay out a sampling regime that gives any confidence in providing data that would allow one to differentiate the effects of snow from the effects of other variables on such things as caribou winter range choice. Caribou are

notoriously variable in their choice of wintering areas, and shifting regional snow depths may play a strong role. So there must be active snow depth measures in chosen winter range areas at the time the animals are using the areas involving field based sampling and not just a few fixed stations.

vii) Noise. Noise disturbance is repeatedly mentioned (e.g., in the Introduction) as a potential impact, but there is no clear methodology for assessing this. What measures of noise levels (or incidence of vehicular or aircraft travel) will be taken, and where? How will any behavioural response by caribou to noise be inferred? Merely analyzing radiotelemetry locations is unlikely to provide reliable data. Ideally, these data should be backed up with ground-based snow-tracking of caribou moving close to the road; or experimental overflights of known caribou thereby measuring directly any response to a known stimulus.

This first effort to radio-collar woodland caribou in the James Bay Lowlands is already providing critical new information on habitat use and movements of this vulnerable species. However, the proponent and the RAs will have to invest significantly more in this research effort to design and execute a longer-term study that stands a chance of assessing impacts of development activities on woodland caribou in and around the Victor Project study area.

5. Precedence set by this major development effort in an as-yet undeveloped region
All comments that we have submitted here go against the backdrop of the lack of precedence of large-scale development in Victor Project study area. There are two issues addressed in the CSR document where it is very clear that neither the proponent nor the RAs are taking this sufficiently under consideration in their assessments of potential environmental and socio-economic impacts: comprehensive land use planning and analysis of cumulative effects.

Comprehensive Land-Use Planning
In WCS Canada's previous letter to the Canadian Environmental Assessment Agency (with the Wildlands League, dated October 18, 2004), we made the following statement:

> *The proposed VDP is within a large area of northern Ontario that constitutes an intact ecosystem with virtually no existing industrial development. In the southern half of the province, industrial development has always preceded land use planning, resulting in conflicts around the need for adequate protection in the face of existing industrial land uses. North of the 51st parallel, we have the opportunity to conduct land use planning before development decisions are made and to proactively chart the course for conservation of Ontario's northern boreal forest region. Numerous government commitments to the conservation of biodiversity are upheld by virtue of the ecologically intact conditions of the province's northern forests and wetlands. Ample experience and empirical data demonstrate*

that simply continuing along the same course in penetrating these northern areas without proper planning will result in erosion of biodiversity.

The Environmental Assessment for the Victor Project is occurring in the absence of land use planning for the area. In conjunction with the EA, a process is needed that is led by the RAs to thoroughly evaluate the ecological values of the area and designate areas that will be under permanent protection that will serve in part to offset those areas occupied by resource development activities and associated road construction. Without undertaking coordinated land use planning, we risk losing the opportunity to proactively plan for conservation and industrial development in Northern Ontario. In order to address this concern in the CSR, the RAs turned to the proponent (6-92) for its response, even though it is clearly a government responsibility. We would like to draw attention to this problem once again. An example of where this lack of planning has already proved to be problematic has been the conclusion reached regarding the fate of the Attawapiskat River Proposed Candidate Waterway Park (ARPCWP), whereby a significant section of the area was removed from the proposed protected area due to lack of coordination between agencies responsible for land uses in the area.

Cumulative Effects

The proponent attempts to address the possibility of cumulative effects that will be incurred by the Victor Project. Because there is at present limited development in the area in question beyond the project itself, the proponent reasons that the "potential for adverse cumulative effects associated with the project is limited" (6-144). Such a conclusion demonstrates a lack of appreciation for the often stimulating effect of new development. In evaluating the potential impacts of this project into the future, the RAs must consider the probability that new development beyond the Victor Project will be inspired, as a direct result, or in response to increased access opportunities.

Recommendations:

1. Our chief recommendation is that this project be referred to a review panel. We base this recommendation on the following considerations, as detailed in this letter:
   - Lack of proper consideration of Species At Risk;
   - Lack of clear reasoning regarding conclusions reached by the Responsible Authorities (RAs);
   - Lack of baseline ecological data from the Victor Project Study Area;
   - Importance of clarifying follow-up activities;
   - Precedence set by this major development effort in an as-yet undeveloped region.
2. The SWAWR should be abandoned as a contingency option during this stage in the process. If any of the alternative access routes are resurrected following this environmental assessment, the proponent should be obligated to:

- demonstrate why the road is necessary through an independent technical assessment of the coastal road;
- demonstrate that all other alternatives to the SWAWR have been deemed not feasible; and
- undergo an individual EA before approval for the SWAWR that demonstrates that all other alternatives to the SWAWR have been deemed not feasible.

3. Proposed ecological monitoring programmes must undergo expert reviews by wildlife and ecosystem scientists as a part of the EA process.
4. The RAs must establish an independent agency with representation from various stakeholders (including First Nations, environmental non-governmental organizations, scientists, and remote tourism operators) to monitor the environmental impacts of the VDP. The agency would receive funding from the proponent for environmental impacts monitoring, ecological research and land use planning by affected communities.

I look forward to discussing this project with you further. Please contact me if you have any questions.

Sincerely,

Justina C. Ray, Ph.D.
Director