

February 10, 2014

Chuck Hubert
Senior Environmental Assessment Officer
Mackenzie Valley Environmental Impact Review Board
200 Scotia Centre
Box 938, 5102-50th Ave
Yellowknife, NT
X1A 2N7

Dear Mr. Hubert,

**Request for Comments on the Draft Terms of Reference for the Dominion
Diamond Ekati Corporation Jay-Cardinal Project (EA1314-01)**

Please find below the Government of the Northwest Territories' (GNWT) comments on the Mackenzie Valley Environmental Impact Review Board Draft Terms of Reference for the Dominion Diamond Ekati Corporation (DDEC) Jay-Cardinal Project (the Project) underdoing environmental assessment.

Topic Title: Impacts to caribou: description of affected caribou populations

Comment(s):

Given the wide ranging nature of barren-ground caribou populations and the possible multiple interpretations of the concept of "local," some clarity is required regarding what we mean by "local population." Using "local population" could be interpreted to refer to only those caribou passing within the direct local study area, which would not constitute a population per se. As such, evaluation of potential population-level impacts and cumulative effects could be too narrow.

Recommendation(s):

- 1) Change the following in the last sentence of the first paragraph in section 7.3.3: "DDEC must describe the impacts to local caribou population(s) from the following Project sources, both in isolation and collectively [...]" to "DDEC must describe the impacts to caribou herds that interact with the Project from the following Project sources, both in isolation and collectively [...]"

Topic Title: Impacts to caribou – energetics and approach to cumulative effects assessment

Comment(s):

Analysis of how the impacts of development affect the energy and protein balance of caribou can help to predict herd-level responses such as changes in birthrate and calf survival. When scaled up to include responses to other human and natural disturbances, an energetics approach can be useful for assessing cumulative effects (CE). While a basic, habitat-based approach in CE assessment for wildlife “subjects of note” may be warranted given the availability of data for most of these species, the GNWT is of the opinion that, given the level of effort required for a “Key Line of Inquiry,” a more substantial approach to CE assessment is required, including an energetics component, habitat component and population component.

Recommendation(s):

- 1) Append the following phrase to the end of the second bullet in section 7.3.3 regarding potential impacts to caribou movements and migration: “[,] including how this might affect the energy and protein balance of caribou moving through the region; affect caribou access to preferred habitats; and affect caribou exposure to predators.”
- 2) Add a new bullet in section 7.3.3 that states, “An analysis of the ways the Project may influence the energy and protein balance of caribou under different seasonal conditions, and to what extent this may affect population demographics. The analysis must include potential behavioural changes resulting from Project components or associated activities, including sensory disturbance, foraging impacts, rest, and caribou movements in the development area and region.”
- 3) Add a new bullet in section 7.3.3 that states, “Cumulative effects assessment approach for caribou must include an energetics component, habitat component, and population component consistent with the current state of cumulative effects assessment of barren-ground caribou.”

Topic Title: Impacts to wildlife of lakebed crossing

Comment(s):

GNWT ability to assess the Project for impacts related to wildlife crossing the dewatered lakebed would be enhanced by a specific mention of what the lakebed will look like over time from a wildlife perspective (i.e., in the relevant sections of the DAR), and by identifying hazards, negative impacts and possible mitigations.

Recommendation(s):

- 1) Replace the seventh bullet in section 7.3.3 to “DDEC will describe the expected substrate of the dewatered lakebed and how it might change over time, analyze possible hazards or impacts to caribou crossing the dewatered lakebed, and describe any mitigations for eliminating or reducing risk.”
- 2) Add a new bullet to section 7.4.3 that states, “The dewatered lakebed including potential hazards or implications from wildlife crossing the dewatered lakebed, and any mitigations for eliminating or reducing such risk.”

Topic Title: Amendments to Wildlife Plans and Programs

Comment(s):

Any changes to be made to DDEC’s wildlife related plans and programs will need to be consistent with the GNWT’s “Draft Wildlife and Wildlife Habitat Protection Plan and Wildlife Effects Monitoring Program Guidelines.” Please find these guidelines attached to this cover letter.

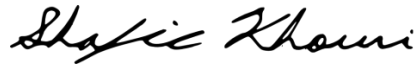
Recommendation(s):

- 1) To the second set of bullets in section 7.5, add the following bullet: “A framework for new plans, or for amendments to existing wildlife related plans, which specifically details the proposed changes to current plans and any revisions that might be required to make such plans consistent with draft guidelines.”
- 2) Add the following under the section dedicated to the Government of the Northwest Territories in Appendix B (Guidelines for Monitoring and Management Programs): “Draft Wildlife and Wildlife Habitat Protection Plan and Wildlife Effects Monitoring Program Guideline.” Note that an updated version of this guideline will be released in the future; as such, the developer should maintain contact with Ms. Andrea Patenaude, Wildlife and Environmental Assessment Biologist, at (867) 920-6487 or at andrea_patenaude@gov.nt.ca. Appropriate stakeholders

(e.g., DDEC, Aboriginal groups) have been, and will continue to be, engaged throughout the development of this guideline.

If you may require any further details, please contact me.

Sincerely,

A handwritten signature in black ink that reads "Shafic Khouri". The signature is written in a cursive style with a large initial 'S'.

Shafic Khouri
Environmental Assessment Analyst
Department of Environment and Natural Resources
Government of the Northwest Territories
e: shafic_khouri@gov.nt.ca / t: (867) 873-7905

Attachment

Wildlife & Wildlife Habitat Protection Plan and Wildlife Effects Monitoring Program Guidelines

Department of Environment and Natural Resources
WILDLIFE DIVISION

DISCLAIMER

These guidelines are intended to assist developers in managing and monitoring wildlife and wildlife habitat. They are also intended to provide direction and a consistent approach for regulatory authorities with a mandate for environmental protection. Consideration of these guidelines should be supplemented by local research, traditional knowledge, and professional expertise and advice obtained from appropriate regulators.

These guidelines do not replace acts, ordinances, regulations or the terms and conditions of regulatory authorizations. Although every attempt has been made to provide up-to-date information, it remains the proponent's responsibility to obtain the most recent information related to wildlife and wildlife habitat, to ensure all regulatory requirements have been met, and to undertake appropriate consultation with territorial and federal government departments and Aboriginal groups.

DRAFT

ACRONYMS

EIA	Environmental Impact Assessment
EA	Environmental Assessment
CEA	Cumulative Effects Assessment
EIR	Environmental Impact Review
GNWT	Government of the Northwest Territories
LSA	Local Study Area
PDA	Project Development Area
RSA	Regional Study Area
SOP	Standard Operating Procedure
VEC	Valued Ecosystem Components
WEMP	Wildlife Effects Monitoring Program
WWHPP	Wildlife and Wildlife Habitat Protection Plan

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1. INTRODUCTION

1.1. PURPOSE

The Government of the Northwest Territories (GNWT) promotes and supports the sustainable use and development of natural resources to protect, conserve and enhance the Northwest Territories environment for the social and economic benefit of all residents. This responsibility is shared with Aboriginal, federal, territorial, and municipal governments, boards and agencies and every resident of the Northwest Territories.

The GNWT is responsible for the conservation of wildlife resources, which can include collection of baseline information; assessing and monitoring the status of wildlife; wildlife habitat; species at risk; wildlife health; assessing impacts on wildlife from human activities; and, regulating wildlife protection and use.

The GNWT is aware of concerns that have been raised by land users, communities and the general public regarding environmental stressors both natural (e.g., forest fire) and human-induced (e.g., industrial development, harvesting, etc.). The GNWT acknowledges these concerns, and that the cumulative effects of these stressors has contributed to increased pressure on wildlife and wildlife habitat in the Northwest Territories (NWT). The GNWT recognizes that continued management and monitoring are necessary to determine and then minimize cumulative effects on wildlife species and their habitat.

The GNWT maintains that wildlife and wildlife habitat protection and effects monitoring should take place as an active collaboration between developers, Aboriginal, territorial and federal governments, Aboriginal organizations, wildlife co-management partners, other affected parties and neighbouring jurisdictions as appropriate.

1.2. WILDLIFE AND WILDLIFE HABITAT PROTECTION PLAN (WWHPP) AND WILDLIFE EFFECTS MONITORING PROGRAM (WEMP)

The GNWT has developed guidelines that will assist proponents in the development of an operational Wildlife and Wildlife Habitat Protection Plan (WWHPP) and a Wildlife Effects Monitoring Program (WEMP). Together, the WWHPP and the WEMP address both local and larger-scale wildlife objectives and are intended to prevent and/or reduce the potential individual and cumulative effects of development on wildlife and wildlife habitat.

The WWHPP and WEMP are intended to be separate, stand-alone documents that are tailored to the nature and scale of each project. Early engagement with the GNWT is encouraged to promote pre-project planning by identifying and addressing environmental

effects at the initial stages of project development. Following these guidelines when drafting a WWHPP and WEMP will facilitate a more efficient and timely review during environmental impact assessment¹ and regulatory processes by addressing wildlife and wildlife habitat protection objectives in a transparent and consistent manner. The guidelines should be viewed as a living document that will be updated and improved in response to operator and regulator experience, comments and suggestions.

1.2.1 Wildlife and Wildlife Habitat Protection Plan (WWHPP) Definition:

The WWHPP outlines the steps necessary to protect personnel, wildlife and wildlife habitat within the Project Development Area (PDA)², also commonly described as a project's direct "footprint." A WWHPP is a management tool to develop and implement clear procedures for employees and contractors in the field, to promote due diligence and to ensure compliance.

An effective WWHPP should include:

- Guidelines to reduce or prevent the potential for interaction between people and wildlife to ensure human safety;
- Guidelines to reduce or prevent any direct impacts from the project to wildlife and/or wildlife habitat;
- Day-to-day standard operating procedures (SOPs) that detail protocols to be used in the field as they relate to wildlife and wildlife habitat;
- Method(s) of data collection, monitoring, and reporting that will be used to document the implementation of mitigation measures, response to wildlife incidents, and any other relevant wildlife observations;
- A description of training and education for employees and contractors on guidelines and SOPs for wildlife issues;
- Links to other management plans with mitigation measures that are relevant to wildlife (e.g. Waste Management Plan, Spill Response Plan); and,
- An adaptive approach to revising practices and procedures to reflect changing site conditions, activity levels or lessons learned in order to continue to mitigate potential effects on wildlife and wildlife habitat.

Data obtained through implementation of a WWHPP should be used to track impacts and to improve management practices within the PDA. Some information may also be

¹ The term 'environmental impact assessment' is meant to encompass preliminary screenings, environmental assessments, environmental impact reviews or joint panel reviews.

² "**Project Development Area**" or "**PDA**" means the land or water area covered by the Project. This includes direct physical coverage (i.e., the area on which the project physically stands) and direct effects (i.e., the disturbances that may directly emanate from the project, such as noise), and is commonly described as a project's direct "footprint."

incorporated into a regional scale monitoring program (e.g., tracking of on-site wildlife mortalities).

1.2.2 Wildlife Effects Monitoring Program (WEMP) Definition

Whereas a WWHPP describes the mitigation measures that will be implemented to reduce local project impacts to wildlife and wildlife habitat, a WEMP encompasses effects monitoring at a Local Study Area (LSA)³ and Regional Study Area (RSA)⁴ scale during the life of the project. In effect, it is a follow-up program as defined under the *Mackenzie Valley Resource Management Act* and *Canadian Environmental Assessment Act, 2012*. A follow-up program is meant to evaluate (1) the soundness of an Environmental Assessment (EA) or Environmental Impact Review (EIR) for a proposed development; and/or (2) the effectiveness of mitigation measures or remedial measures imposed as conditions of approval of the proposal.

The specific contents of a WEMP will depend on the scope of the project, but in general terms, the WEMP is intended to provide details about larger-scale monitoring objectives and methods (e.g., monitoring wildlife species threatened by potential increases in harvester access due to project roads). For example the WEMP could (i) describe a program to test impact predictions made by a developer during a project's environmental impact assessment or the effectiveness of mitigation techniques employed during the construction, operation, closure and post-closure phase of a project, (ii) describe a developer's participation in existing regional wildlife monitoring programs implemented by the GNWT and/or other developers⁵, and/or (iii) describe support for wildlife research programs led by other parties that address issues of shared concern.

Early engagement by the developer and ongoing dialogue with the GNWT and other parties is encouraged to ensure WEMP objectives, methods, and deliverables are appropriate.

An effective WEMP should:

1. Identify and address outstanding wildlife concerns following an environmental impact assessment;

³ "Local Study Area" or "LSA" means the area surrounding and including the Project Development Area, where there is reasonable potential for immediate environmental and human impacts due to ongoing project activities;

⁴ "Regional Study Area" or "RSA" means the area where there is the potential for large-scale impacts on wildlife and wildlife habitat, including cumulative effects, and that will be relevant to the assessment of any wider-spread effects of the project. For example, the regional study area may be defined by the range of a wildlife species of concern.

⁵ An example of a collaborative regional-based monitoring at a scale appropriate to the species is documented in *Joint Regional Grizzly Bear DNA Proposal, 2012* (Rescan 2012).

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2. Be focused on key Valued Ecosystem Components (VEC) and other species of importance that are typically found in or near the area surrounding the project;
 3. Be conducted within a study area that is appropriate to the proposed predictions for the project VEC;
 4. Have clear objectives and testable predictions, questions or hypotheses;
 5. Define the metrics that will be used to measure progress towards an objective or to test predictions, questions or hypotheses;
 6. Demonstrate that survey design, methodology, sample size, analysis and reporting will adequately meet the objectives of the monitoring program;
 7. Identify any underlying assumptions that may affect interpretation and validity of results;
 8. Use tested standardized protocols/methods/approaches that are in use by other development projects so that monitoring results can be combined at a regional scale;
 9. Be developed and reviewed in collaboration with Aboriginal partners, government, regulatory agencies, and other affected parties including other project proponents as appropriate; and
 10. Be developed such that monitoring and mitigation techniques can be revisited and revised pending new information (e.g., developed using an adaptive management framework). Any changes made to methodologies should be made in consultation with appropriate parties in order to ensure consistency with other monitoring programs.

The results of the WEMP are to be used to support adaptive management approaches, if needed, and to contribute to cumulative effect assessment (CEA), if appropriate. Results from a well-designed WEMP can also be used to inform guidelines associated with future development projects in the Northwest Territories.