



April 11, 2012

VIA EMAIL

Eli Nasogaluak  
Environmental Impact Review Coordinator  
Environmental Impact Review Board  
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eirb@jointsec.nt.ca

Dear Mr. Nasogaluak,

**Re: GNWT Round 2 IR Responses, File Number 02/10-05, Inuvik to Tuktoyaktuk Highway Construction Project**

Please find attached the Government of the Northwest Territories responses to Information Requests 77, 78 and 80.

The Government of the Northwest Territories expects to file its responses to IRs 73, 74, 75, and 76 prior to April 30, 2012. The Government is undertaking more extensive data analysis for key VCs as part of this work and requires sufficient time to ensure the responses are reviewed by our wildlife staff prior to submission.

Please contact me at gavin\_more@gov.nt.ca or 867-873-7107 if you have any questions regarding the attached submission.

Sincerely

A handwritten signature in blue ink that reads "Gavin More".

Gavin More  
Manager  
Environmental Assessment and Monitoring  
Environment and Natural Resources

**IR Number:** 77

**Source:** MSES

**To:** Wildlife Management Advisory Council  
Fisheries Joint Management Committee  
**Government of the Northwest Territories (ENR)**  
Department of Fisheries and Oceans  
Environment Canada

**Subject:** Cumulative effects assessment – induced effects and increased access (EIS Sections 5.3.1.2, p. 631; Responses Round 1 IR #51)

### **Preamble**

The Developer acknowledges that it anticipates the completed Highway will make it easier for people to access the land for their various traditional, recreational or other pursuits. The Developer points out that to ensure the environment of the area remains protected, it will be important for the users of the Highway to abide by any “management restrictions” that may need to be developed for the Highway by the resource management agencies and co-management bodies in consultation with the HTC and other interested stakeholders. The Developer has not defined what those anticipated “management restrictions” might be in the EIS. It is not clear how those potential induced environmental impacts through increased access (i.e., increased harvesting of wildlife, potential damage to vegetation, increased random camping, etc) were quantitatively factored into the cumulative effects assessment.

### **Request/Response:**

***77.1 Please describe and explain the anticipated “management restrictions” that may need to be developed for the Highway.***

The GNWT notes once the highway opens the Department of Transportation’s legislation will apply. This legislation, including the **Public Highways Act** and regulations, and **Transportation of Dangerous Goods Act**, provides for the Department of Transportation to undertake specific restrictions on highway users to provide for the safety of users. Several of these restrictions may be used to reduce conflicts with wildlife on or crossing the public highway such as “speed restrictions”, “no stopping”, “temporary road closures during peak migration periods”, etc. For example, the Developer stated in IR Round 1 Response 34.5, *“if particular sections of the road were found to be used heavily by caribou, enforcement patrols could be increased and additional signs with lower speed limits could be placed at appropriate locations.”*

The GNWT can also develop, with the consent of the Wildlife Management Advisory Council and/or Advisory Committee for Cooperation on Wildlife Management harvest management options. These could include:

- Wildlife Management Zones established under the **NWT Wildlife Act** and regulations, which can restrict harvesting by sport, outfitter or subsistence harvesters (i.e. is managed under a zone system). Figure 3.1.9-14 of the EIS shows the current hunting restrictions for barren-ground caribou management zones. As per the current Wildlife Regulations I/BC/07 and G/BC/02 are closed all year and I/BC/08 is closed from April 1 to June 15. The restrictions can be adjusted to meet changes in herd levels.
- Reduced hunting quotas are currently controlled under the Wildlife Regulations through a tag-issuing system. Restrictions on sex or age of the animals harvested can also be imposed. The EIS (p. 249) describes the current zone based restrictions for I/GB/O3 and I/GB/O4. In the ISR, the **NWT Wildlife Act** regulations are established based on Hunters and Trappers Committee by-laws.
- Special Management Area can be established with specific restrictions for features like highways. IR Round 1 Response 34.3 describes the restrictions for the Dempster Highway in the NWT established under the **Dempster Highway Special Management Area Regulations** (i.e. a one-week closure and restricted use of motorized vehicles in effect for the NWT portion of the Dempster Highway) to let the caribou leaders pass and protect habitat.
- Restricted hunting areas can be established to conserve a species. For example, the Tibbitt-to-Contwoyto winter road in the NWT runs through a Restricted Hunting Area established to protect the Bathurst barren-ground caribou herd (see IR Round 1 Response 34.3).
- Restricted hunting corridors may be established for the conservation of a species or public safety (i.e. no hunting within a specified distance from a Highway). Again, this would require the support of the Inuvialuit Game Council and Wildlife Management Advisory Council. The corridor would be within the Inuvialuit Settlement Region and any legal restriction to Aboriginal hunting rights would be established the *NWT Wildlife Act* based on recommendations from the WMAC and IGC and incorporation of the HTC by-laws into the regulations under (see IR Round 1 Response 34.4).
- Voluntary restrictions can also be developed by harvesters. As an example, in the past subsistence harvesters have voluntarily allowed a period of time for the Porcupine caribou leaders to cross the Dempster Highway before initiating their harvesting near the highway.

**77.2 Please indicate when “management restrictions” will be developed, whether they will be in place prior to Highway completion and who will be responsible for implementation and enforcement.**

Wildlife management zones and harvest restrictions are revisited annually. In the ISR, restrictions on Aboriginal hunting rights are established through recommendations from WMAC and the IGC. These recommendations are incorporated into the HTC by-laws which are translated into regulations under the *NWT Wildlife Act*. The GNWT renewable resource officers are responsible for enforcing the regulations. The officers run check stations on primary roads

and conduct patrols. As with most law enforcement, the support of community members in reporting suspected violations is important.

The ***Northwest Territories Fishery Regulations*** are made under the federal **Fisheries Act**. The regulations establish restrictions for sport fishermen including daily catch limits and possession limits as well as information on Special Management Areas. The GNWT provides a guide to the NWT Sport Fishing Regulations. Licenced vendors in the ISR also provide a “Fishing in the ISR” brochure. GNWT renewable resource officers, along with DFO, are responsible for enforcing the Regulations.

***77.3 Please explain and justify how “management restrictions” will be evaluated in terms of their relative success at minimizing or eliminating environmental impacts.***

The GNWT is responsible for surveys of key wildlife species under **the NWT Wildlife Act** and for providing harvest level recommendations to WMAC and other appropriate co-management parties. The success of the restrictions are evaluated in consultation with the parties and recommendations for changes to restrictions are undertaken.

**IR Number:** 78

**Source:** MSES

**To:** **Government of the Northwest Territories (ENR)**  
Environment Canada  
Aboriginal Affairs and Northern Development Canada

**Subject:** Cumulative effects Management – Regional Initiatives (EIS Sections 5.4.1, p. 643; and Table 5.4.1-1, p.644 and Responses Round 1 IR #53.1 and #53.2, p. 130)

**Preamble**

When asked in IR #53.1 to explain how the Developer's participation in regional initiatives will assist in the management of cumulative effects for the development, the Developer responded:

*"The GNWT Department of Transportation acknowledges that its department role in regional cumulative management is limited to its departmental mandate. The Developer is directly responsible for constructing public highways and maintaining these highways after completion. The department does engage with other agencies in research activities (for example, the effect of highways on permafrost) or vice versa that relate to management of these public assets. For this project, the role of the Developer will be to engage with other GNWT departments with mandates for effects management as requested. At this time, the Developer is committed to providing information collected in the planning and operations phases of this project to those departments or agencies or other developers that will aid them in their management activities (IR Responses, #53.1, p.130)."*

**Request/Response:**

**78.1 Please explain how AANDC, ENR and Environment Canada will engage the Developer with respect to cumulative effects management in the context of the proposed project.**

The GNWT is providing advice to the Developer regarding project specific mitigations to reduce residual effects of the project. The GNWT, as part of its co-management wildlife planning process, will provide advice on the cumulative effects of other projects and human activities. The GNWT will continue regional monitoring to determine steps the Developer can, within its mandate, undertake to assist in the management of effects. More importantly, the GNWT will be engaged with the Proponents of the Mackenzie Gas Project during the preparation of wildlife management plans and monitoring programs as required by the National Energy Board terms and conditions. The GNWT's Western NWT Biophysical Study is also a component of the GNWT's effort to ensure cumulative effects are understood and managed in the ISR and Mackenzie Valley.

**78.2 Please provide examples of tangible results from other developments for cumulative effects regional initiatives in the ISR and/or the Northwest Territories.**

**A. Cumulative Impacts Monitoring Program (CIMP)**

The Cumulative Impacts Monitoring Program (CIMP) is a requirement of the **Mackenzie Valley Resource Management Act** and the responsible authority is AANDC<sup>1</sup>. The GNWT is a member of the CIMP Working Group. AANDC has initiated a community monitoring pilot program in the ISR which will:

- encourage community-based monitoring and community capacity-building;
- provide resources to fill the gaps in current monitoring activities;
- report on the health of the environment, which includes biophysical, social and economic components;
- help with better decision-making to protect the environment;
- include both scientific and traditional knowledge; and,
- help coordinate monitoring and reporting in the NWT.

A central component of the NWT CIMP is the NWT Discovery Portal. The NWT Discovery Portal is a joint initiative between the Government of the Northwest Territories, Centre for Geomatics; and the following federal departments of Canada: Aboriginal Affairs and Northern Affairs, Fisheries and Oceans Canada, and Natural Resources Canada. Both levels of government and their respective departments have created the NWT Discovery Portal to provide a common and primary source for discovering, storing and sharing environmental monitoring knowledge. Access to the NWT Discovery Portal is available at: <http://nwtdiscoveryportal.enr.gov.nt.ca>

**B. Environmental Studies Research Funds (ESRF)**

The Environmental Studies Research Funds (ESRF) is a research program which sponsors environmental and social studies<sup>2</sup>. The ESRF program, initiated in 1983, receives its legislative mandate through the [Canada Petroleum Resources Act](#) (CPRA), which was proclaimed in February 1987. The purpose of the ESRF is to finance environmental and social studies pertaining to the manner in which and to the terms and conditions under which petroleum exploration, development, and production activities on frontier lands should be conducted<sup>3</sup>. It is designed to assist in the decision-making process related to oil and gas exploration and development on Canada's frontier lands. The funding for the ESRF is provided through levies on frontier lands paid by interested holders such as the oil and gas companies and administered by Natural Resources Canada for the Minister of Natural Resources Canada and the Minister of Aboriginal Affairs and Northern Development. The

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<sup>1</sup> <http://www.nwtcimp.ca/index.asp>

<sup>2</sup> Source [http://www.esrfunds.org/abopro\\_e.php](http://www.esrfunds.org/abopro_e.php)

<sup>3</sup> **Canada Petroleum Resources Act**, s.76(2)

ESRF is directed by a joint government/industry/public Management Board and is administered by a small secretariat, which resides in the Office of Energy Research and Development, Natural Resources Canada, Ottawa, Ontario. Reports are available on the ESRF website at: <http://www.esrfunds.org>. Examples of relevant studies include:

- Antoniuk, T., S. Kennett, C. Aumann, M. Weber, S. Davis Schuetz, R. McManus, K. McKinnon and K. Manuel. 2009. Valued Component Thresholds (Management Objectives) Project. Environmental Studies Research Funds Report No. 172. Calgary, AB. 164 p.
- Dillon Consulting Limited and Salmo Consulting Inc. 2005. Beaufort Delta Cumulative Effects Project. Environmental Studies Research Funds Report No. 155. CD-Rom
- Fedirchuk, G. J., S. Labour, N Nicholls, FMA Heritage Resources Consultants. 2005. *Traditional Knowledge Guide for the Inuvialuit Settlement Region, NWT: Volume 1: Literature Review and Evaluation; Volume II: Using Traditional Knowledge in Impact Assessments*. CD-Rom Environmental Studies Research Funds Report No. 153.
- KAVIK-AXYS Inc. 2010. *Review of Tuktoyaktuk Harbour as a Base for Offshore Oil and Gas Exploration and Development*. Environmental Studies Research Funds Report No. 179. Calgary, AB. p. 100

### **C. Beaufort Regional Environmental Assessment (BREA)**

The Beaufort Regional Environmental Assessment (BREA) is a five year, multi-stakeholder initiative designed to sponsor regional environmental and socio-economic research to assist in preparing all parties, including the federal government, to respond to new investments in oil and gas in previously unexplored areas of the Beaufort Sea<sup>4</sup>. BREA is primarily a research-based initiative to inform issues that recur with project specific regulatory applications. The initiative is funded by Canada and led by AANDC. The GNWT has a member on the Steering Committee and Research Committee and sits on several working groups including: Cumulative Effects; Socio-economic Indicators; Waste Management; and, Climate Change. Information on BREA activities can be found at: <http://www.beaufortrea.ca/>

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<sup>4</sup> Source <http://www.aadnc-aandc.gc.ca/eng/1310583424493>

**IR Number:** 80

**Source:** MSES

**To:** Wildlife Management Advisory Council  
Fisheries Joint Management Committee  
**Government of the Northwest Territories (ENR)**  
Department of Fisheries and Oceans  
Environment Canada

**Subject:** Environmental Management Plans and Effects Monitoring (IR Responses Round 1 #11, 16, 55, 61, 62, 63 and 66)

### **Preamble**

In the response to IR #55, the Developer presents its commitments (Table F) to a number of mitigation measures. However, the Developer does not respond to the question about how the mitigation would address the potential effects of the ITH. Only at the end of the Table F the Developer briefly refers to an “effects monitoring table”. However, it is unclear how such a table would satisfy the requirement for testing of impact predictions, developing significance thresholds, and determining adaptive measures. As per the Canadian Environmental Assessment Agency’s (CEAA 2009) *Operational Policy Statement, Adaptive Management Measures under the Canadian Environmental Assessment Act*, it is imperative to understand how and when, in relation to the construction schedule, effects monitoring programs will be developed.

Under the Operational Policy of CEAA, **compliance monitoring on its own does not satisfy the requirements for a follow-up program**. Compliance monitoring also does not adhere to the GNWT’s (2006a) position statement which requires that *monitoring and reporting programs need to be designed to test impact predictions*. Moreover, the CEAA operational policy states **“If project implementation is likely to begin shortly after approval, the follow-up program should be fully designed and a reliable baseline established during the environmental assessment phase of the project.”**

The Developer’s response to IRs 11, 16, 61, 63 and 66 are similarly deficient in clarifying how adaptive management measures will be developed in light of CEAA’s policy.

### **GNWT Comments on Preamble**

The GNWT believes the Preamble quotes from the two CEAA guidance documents misrepresent the contents of the guidance documents. First, the guidance provides the following definition: *“Compliance monitoring verifies whether required mitigation measures were implemented.”* This is a standard reporting requirement to ensure legislated mitigations, terms and conditions of authorizations as well as normal best practice mitigations are carried out. Some authorities [e.g. NEB] often require an additional step of reporting on mitigations that were not



implemented and require reporting on the steps to be undertaken by a developer to bring the project back into compliance. Compliance monitoring project is not, in itself, intended to monitor effects of a project or confirm the success of mitigation measures. However, a link can be made through a requirement by a regulator or a voluntary reporting commitment by a developer.

The guidance correctly places more emphasis on mitigation monitoring, which is described as *“mitigation monitoring to verify mitigation measures were properly implemented and that such measures mitigated the predicted adverse environmental effects as anticipated by the responsible authority ... ”*. In short, compliance monitoring could occur without a developer assessing the effectiveness of its best practices or other mitigations. This is, obviously, not the intent of the regulators or the GNWT.

The guidance further describes a “follow-up program” as used to:

- verify predictions of environmental effects identified in the environmental assessment;
- determine the effectiveness of mitigation measures in order to modify or implement new measures where required;
- support the implementation of adaptive management measures to address previously unanticipated adverse environmental effects;
- provide information on environmental effects and mitigation that can be used to improve and/or support future environmental assessments including cumulative environmental effects assessments; and,
- support environmental management systems used to manage the environmental effects of projects.

The guidance document states that *“adaptive management is a planned and systematic process for continuously improving environmental management practices by learning about their outcomes. Adaptive management provides flexibility to identify and implement new mitigation measures or to modify existing ones during the life of a project”*. The examples provided in the operational guidance clearly indicate adaptive management is linked to specific significant issues raised in the assessment rather than all ‘potential effects’. More specifically, adaptive management can be adopted upon consideration of:

- the amount of prior experience with the specific type of project in the specific type of environment;
- the possibility that a mitigation measure may not function as intended;
- the possibility that some aspects of the proposed mitigation may not actually be needed, or that they are no longer required;
- the likelihood of other developments or projects that could lead to cumulative environmental effects;
- the extent of knowledge and understanding of key environmental indicators and action thresholds;

- the likelihood of broad-scale environmental change that would affect the project or influence the nature of mitigating its environmental effects;
- the likelihood that advances in scientific knowledge or technology over the life of the project may enable improved mitigation measures;
- the extent to which public concern about specific issues could be alleviated or reduced through a commitment to follow-up or adaptive management as appropriate; and,
- the opportunity to learn from the results of follow-up or adaptive management and improve the current project or the quality of future EA.

The guidance also states *“It is important to identify key environmental indicators when planning for follow-up and potential adaptive management measures. The indicators should be used to assess and address assumptions and uncertainties identified in the EA”*. Adaptive management is, therefore, not a consistent requirement for all effects; rather it is to be applied when necessary to specific issues.

#### **Request/Response:**

**For each resource and regulatory agency, please clarify your agency’s role in developing an effects monitoring and an adaptive management program. Please identify:**

#### ***80.1 Which programs you anticipate to review and approve as part of your agency’s mandate.***

The GNWT recognizes there is a difference between an ‘effects monitoring program’ and an ‘adaptive management program’. An effects monitoring program with reporting activities should be broad in the types of effects monitoring conducted. An adaptive management program, within the definition of CEEA Operational Guidelines, should be specific to VCs for which there is greater uncertainty of the effectiveness of mitigations or there is an opportunity to learn from the results of the project or related activities on specific VCs.

The GNWT also recognizes there is a difference between its ability to ‘review’ a monitoring program for which it has expertise or a resource management responsibility versus “approval” of a monitoring program. The latter is limited to departments or regulators whose authority to ‘approve’ a monitoring program is established in legislation. It is typical for developers to prepare a monitoring program in consultation with the GNWT and other parties. This may also be a requirement of a regulator as part of an authorization.

The GNWT will review and provide advice on relevant parts of the following plans/programs listed in Conformity Response 1 #5 (pp. 24 – 25) and/or Round 1 IR Response 67.1 and 67.2:

- Construction Phase Environmental Management Plan and components plans/programs:
  - Wildlife and Wildlife Habitat Protection
  - Pit Development
  - Waste Management

- Spill Contingency
- Hazardous Waste Management
- Health and Safety
- Operations Phase Environmental Management Plan and components plans/programs:
  - Post-construction Monitoring

***80.2 What regulatory tools are available to your agency, to ensure that both compliance and effects monitoring would be in place to ensure that the effects on any given valued component will be at or below the effects predicted in the EIS.***

The GNWT – ENR has requirements for compliance reporting within the **NWT Wildlife Act**, which will largely be applicable to construction phase facilities and activities. The GNWT expects these requirements and reporting procedures to be included in the Wildlife and Wildlife Habitat Protection, Waste Management Plan and/or Health and Safety Plan. The GNWT expects the environmental and wildlife monitors to ensure compliance reporting and effects monitoring are carried out.

Certain other requirements including monitoring and reporting are expected to be included as terms and conditions by regulators functioning under the ILA or Territorial Land Use Regulations. For some matters, the regulator will establish thresholds for the Developer rather than the predictions in the EIS. For some matters, the reporting of compliance with regulatory guidance negates the requirement to track whether ‘any given valued component will be at or below the effects predicted in the EIS’.

***80.3 How your agency would ensure that the above programs would be designed and implemented prior to construction.***

The GNWT is currently working with the Developer on a construction phase wildlife mitigation and monitoring plan. A separate operations phase plan will also be developed.

The GNWT – ENR is also modifying its ongoing regional monitoring for several key mammal VCs. This will assist in understanding the effectiveness of resource management plans under development [e.g. draft **The Cape Bathurst, Bluenose-West and Bluenose-East Barrenground Caribou Herds Management Plan** appended to Conformity Response 2b and 2c]. This will also improve the monitoring of effects of future developments within caribou range. The GNWT – ENR will provide the monitoring results to its co-management parties including WMAC and Advisory Committee for Cooperation on Wildlife Management. It is also intends to provide the results to GNWT – DOT for its public education and highway signage as applicable over time.