



October 22 2010

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Via email: eirb@jointsec.nt.ca

Re: Interim Draft Environmental Impact Statement Terms of Reference Comments

Please find attached the Government of the Northwest Territories comments on the Draft Terms of Reference for the Environmental Impact Statement issued for the Construction of the Inuvik to Tuktoyaktuk Highway.

Please contact Amy Jenkins at 920 6593 or Amy_Jenkins@gov.nt.ca if you have any questions concerning this submission.

Sincerely

Gavin More
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Environment and Natural Resources

GNWT COMMENTS ON DRAFT EIS TERMS OF REFERENCE

Missing Component

Reference: Table of Contents

The identification of Residual Adverse Effects that cannot be mitigated is not clearly identified in the TOR. It is suggested a Residual Adverse Effects section preceding the Follow up and Monitoring section be added.

Mitigative and Remedial Measures

Reference: TOR 12.0

It is suggested that Proponents also include a table summarizing all proposed mitigation measures on the impacts to all VC's identified in the impact assessment. The intent would be to clearly demonstrate the VCs and the linked mitigation measures and remedial measures.

Spill Contingency Planning (SCP)

Reference: TOR 6.0, Project Description

Spill Contingency Planning should be identified under section 6.0 Project Description. GNWT recommends the TOR include a requirement for the Proponents to include a goal oriented statement regarding the proper management of project related wastes and sufficient detail to ensure the expected level of information is provided.

Spill Contingency Planning (SCP)

Reference: TOR 13.3 Environmental Management Plans

It is the responsibility of the Proponents to ensure there is a Spill Contingency Plan (SCP) in place which covers all phases, components, and contractors associated with the proposed Project.

GNWT recommends the TOR include a requirement for the Proponents to include a goal oriented statement regarding Spill Contingency Planning (SCP) in their EIS. The Plan for construction should be available 60 days prior to the commencement of construction and a Plan for operations should be available 60 days prior to the opening of the road to the public.

To assist the Proponents in the development of these plans, the GNWT offers specific suggestions as to how the stated goal can be achieved with sufficient detail to ensure the

expected level of information is provided. Specifically, the Spill Contingency Plans should include, but not be limited to:

- i) The name, address and job title of the owner or person in charge, management or control;
- ii) A cover page that clearly identifies: The NWT 24-Hour Spill Report Line; the name, job title and 24-hour telephone number for the person(s) responsible for activating the Spill Contingency Plan;
- iii) A description of the facility including the location, size and storage capacity;
- iv) A description of the type and amount of contaminants normally stored at the location described in paragraph (c);
- v) A site map of the location described in paragraph (c);
- vi) The steps to be taken to report, contain, clean-up and dispose of contaminants in the case of a spill;
- vii) The means by which the spill contingency plan is activated;
- viii) A description of the training provided to employees to respond to a spill;
- ix) An inventory of and the location of response and clean-up equipment available to implement the spill contingency plan;
- x) The date the contingency plan was prepared"

The GNWT recommends the Proponents consult and reference the *Guidelines for Spill Contingency Planning*, prepared by Water Resources Division Indian and Northern Affairs Canada Yellowknife, NT April 2007.

Also, with regard to staging of fuel on Commissioners Land, ENR recommends the Proponents consult the *NWT Spill Contingency Planning Regulations*¹."

Waste Management

Reference: TOR 6.0, Project Description

Waste management is another component of the project that should be included within Section 6.0 Project Description. Standard Operating Procedures should encompass management of all waste streams. Although a Waste Management Plan is identified as a follow up and monitoring program under 13.3 Environmental Management Plans, the management of waste streams need to be integrated into project planning. GNWT recommends the TOR include a requirement for the Proponents to include a goal oriented statement regarding the

¹ http://www.enr.gov.nt.ca/eps/pdf/spill_contingency.pdf

proper management of project related wastes and sufficient detail to ensure the expected level of information is provided.

Waste Management

Reference: TOR 13.3 Environmental Management Plans

The GNWT also recommends the Proponents develop a Waste Management Plan for construction which should be available 60 days prior to the commencement of construction and a Plan for operations should be available 60 days prior to the opening of the road to the public.

The GNWT recommends the EIS contain information regarding the management of Project related waste in sufficient detail to clearly demonstrate:

- preparedness for proper and authorized transport and disposal of hazardous and non-hazardous waste,
- to prevent the discharge of contaminants and reduce their impacts on the natural environment and health and safety;
- to ensure the minimization of attraction of wildlife to wastes;
- to ensure that wastes are stored, transported, and disposed in an appropriate manner and in authorized locations.

To assist the Proponents in the development of these plans, the GNWT offers specific suggestions as to how the stated goal can be achieved with sufficient detail to ensure the expected level of information is provided. These plans should apply to all Proponents and contractors involved in receiving, transferring, and transporting waste and materials for Proponents activities on land, water, and air. Specifically, the Waste Management Plans should include, but not be limited to: and include, but not be limited to:

- Identify waste sources, types (including but not limited to liquid, solid, non-hazardous, hazardous, combustible and non-combustible) and approximate quantities to be produced and include a description of waste segregation methods;
- A description of all on-site treatment and disposal methods;
- A description of all waste streams to be transported off-site, methods of disposal and final disposal locations.

Species of Concern

Reference: TOR 10.1.5, Species of Concern

Under 10.1.5 the TOR states: “The Developer must consider any change that the Project may cause to a listed wildlife species, its critical habitat or the residences of individuals of that species, as those terms are defined in subsection 2(1) of SARA. Accordingly, the Developer shall take into account the requirements of SARA and provide the information necessary to evaluate the potential impacts of the Project on the species contemplated by this Act including mitigation and monitoring.”

The GNWT notes that, in addition to the Federal SARA, the Proponents must also take into account the GNWT’s newly enacted legislation, *Species at Risk (NWT) Act* which applies to any wild animal or plant species managed by the Government of the Northwest Territories, on both public and private lands, including private lands owned under a land claims agreement.² The GNWT also recommends that species assessed by COSEWIC but not identified on any Schedules under SARA as well as any species on the NWT General Status Ranks considered “at risk” in the NWT be included as a requirement to ensure identification and protection of all wildlife at risk.

To assist the Proponents, the GNWT’s recommended steps for considering Wildlife at Risk in Environmental Assessment and Environmental Impact Reviews are:

1. Verify appropriate identification of species during Screening
2. Notify Competent Minister (s) or Minister of ENR and expert department (s) if development overlaps with range of Wildlife at Risk species
3. Determine whether the development is likely to affect Wildlife at Risk or its critical habitat or its habitat covered by a regulation
4. Review and evaluate proposed monitoring for Wildlife at Risk
5. Verify that mitigations and monitoring fit with species recovery strategies, action plans, management plans, or other recovery documents.

The Department of Environment and Natural Resources website contains territorial recovery strategies and/or management plans. National Recovery Strategies and/or National Management Plans can be obtained on Environment Canada’s website.

² 2010 Edition, Species At Risk in the Northwest Territories, Government of the Northwest Territories, Department of Environment and Natural Resources.
http://www.enr.gov.nt.ca/_live/documents/content/Species_at_Risk_in_the_NWT%202010_Eng.pdf

Wildlife and Wildlife Habitat Management

Reference: TOR 10.1.7

Appendix A, Table 1

13.3 Environmental Monitoring Program

In order to meet the Wildlife and Wildlife Habitat Goal as identified in Appendix A, Table 1, “Protect all wildlife and wildlife habitat and minimize habitat losses throughout all phases of the proposed development” the GNWT suggests that a Wildlife Management Plan be the intended outcome for managing the VC’s identified through the Wildlife and Wildlife Habitat Impact Assessment (TOR 10.1.7).

It is noted that under Section 13.0 Follow up and Monitoring subsection 13.3 Environmental Management Plans, the development of a wildlife management plan and caribou protection plan are identified.

A Pre Construction and Construction Wildlife Management Plan should be available 90 days prior to the start of any pre-construction activities. An Operations and Highway Maintenance Wildlife Management Plan should be finalized 90 days prior to opening of the road to the public.

To assist the Proponents, the GNWT further recommends that all wildlife management plans be drafted in consultation with ENR, Inuvialuit Game Council, Wildlife Management Advisory Council-NWT, Gwich’in Renewable Resource Board, appropriate Hunter and Trapper Committees, Environment Canada – Canadian Wildlife Service as well as the Department of Fisheries and Oceans. The Plan should include:

- The identification of the role of wildlife monitors
- Mitigation and monitoring specifics, including but not limited to,
 - Minimizing wildlife mortalities due to vehicular collision, increased harvester access, etc.
 - Operating Procedures related to project - wildlife interaction (wildlife deterrent procedures, wildlife sighting protocol, etc.)
 - Measures to avoid disturbance to important and/or critical habitat
 - Measures to avoid disturbance to species at sensitive or critical times of year

Sensory Disturbance

Reference: TOR 10.1.3

Noise

TOR 12.1.2

Mitigative Measures, What Developers should consider

TOR 13.3

Environmental Monitoring Programs

The TOR 10.1.3 states “The Developer shall describe and evaluate the potential impacts of Project-related noise, including consideration of: disturbance to fish, wildlife and birds”. The GNWT further suggests that impacts to barren ground caribou and grizzly bears in particular be assessed through each project phase.

Additionally, under 12.1.2 developers are required to provide a “description of the proposed mitigation to reduce or eliminate potential impacts”. The GNWT recommends this section clearly identify mitigation measures to address sensory disturbance to wildlife, particularly caribou and grizzly bears, during each project phase.

And as a follow up to this mitigation measure under section 13.3 Environmental Monitoring Programs, sensory disturbance monitoring options should be identified to determine effectiveness of each mitigation measure.

Air Quality

Reference: **TOR 10.1.2 Air Quality**
 TOR 13.3 Environmental Monitoring Programs

The TOR 10.1.2 states “Describe and evaluate the potential impacts of the Project on air quality” in addition to this impact assessment the GNWT suggests dust suppression techniques be identified. As a follow up to this measure, monitoring options on the effectiveness of dust suppression techniques should be clearly identified in the Environmental Monitoring Program.

Vegetation

Reference: **TOR 10.1.9**
 TOR 13.3

The GNWT suggests that additional clarification be provided under the “Re establishment of vegetation and reclamation borrow sites and other disturbances”, particularly

- identification of vegetation types and seed mixes to be used
- identification of the specific borrow sites to be re-vegetated, and those borrow sites that will not be re- vegetated

The GNWT further suggests that impacts to vegetation be managed through a monitoring program as identified under TOR 13.3 Environmental Management Plans. Specifically, a monitoring program and options to minimize off road activities during operations phase of road should be identified.

Harvesting

Reference: **TOR 10.2.8**

The GNWT notes that quantitative baseline information and hence predictions for the requirements in this section will be very difficult to accomplish. The GNWT also notes that communities in the ISR and Gwich'in settlement areas have wildlife management systems established under land claim agreements. Management of harvesting fall to a combination of

Councils and Boards as well as the GNWT Department of Environment and Natural Resources and federal departments including Environment Canada and Department of Fisheries and Oceans.

The GNWT notes several requirements are highly interrelated or subcomponents of an overarching nature. The GNWT recommends re-organizing the requirements and grouping or consolidating linked requirements as follows:

Describe and evaluate the potential impacts of the Project, for the preferred and alternate routes, on harvesting during both construction and operation including a consideration of:

- *Changes in access, including increased access to the land and surrounding lakes, as well as increased access to an environmentally and culturally sensitive area (Husky Lakes).*
- *Changes in the abundance and distribution of harvested resources, including wildlife, bird, fish and vegetation, that would negatively affect harvesting*
- *Disturbance of harvest patterns; or loss or alteration of high-value harvest area including:*
 - o *Changes to harvest effort as perceived by harvesters.*
 - o *Changes in harvester travel patterns.*
 - o *Changes in harvest levels.*
 - o *Changes to harvesters costs.*
 - o *Competition between harvesters within and between communities as a result of increased access and loss or alteration to the land resulting from the Project.*
- *Changes in the quality of harvested species (including contamination) that would negatively affect their consumption or sale.*
- *Measures to avoid or minimize changes in the abundance, distribution, or quality of harvested species, or mitigate the consequences of such changes.*
- *Mechanisms to control Project workforce-related hunting, fishing, or harassment of animals*
- *Mechanisms of resource management agencies and other parties to control hunting, fishing, or harassment of animals by:*
 - o *resident hunters and fishers*
 - o *non resident hunters and fishers*
 - o *aboriginal harvesters*

Socio Economic Targets

Reference: TOR 13.1 Environmental and Socio-Economic Effects Monitoring

The TOR states: “Where the Developer does not present such data for bench marks and targets, the Developer shall commit to a schedule and a process by which such data will be provided and used in the development of concrete **follow-up and monitoring targets**. The **targets shall be**

used in defining the expected success of mitigation... For each effect of concern, this table shall include, at a minimum, information on what the indicators and the parameters for the measurement will be and what the target or management goal will be.

The GNWT is concerned that the word “target” implies or may be interpreted to mean a specific quantitative target for both biophysical and socio-economic VCs. The GNWT notes that not all socio-economic indicators or data are conducive to quantitative targets. This position is supported by experts in this field. For example, in his discussion on socio-economic impact significance determination to the Joint Review Panel for the Mackenzie Gas Project, Dr. David Lawrence recommended grouping economic and social impacts in the following manner:

- i) Those that are easy to measure but have no clear thresholds [or targets],
- ii) Those easy to measure and having some capacity thresholds,
- iii) Those possible to measure and with some basic thresholds (e.g. class sizes and doctors per 1000 population), and
- iv) Those that are largely qualitative and with no obvious thresholds.

Dr. Lawrence recognized that such grouping helps “determine the appropriate mix of qualitative and quantitative criteria, [and] the extent to which thresholds can be defined ...”³ The implication is that thresholds or targets may not be defined for all socio-economic impacts. Dr. Lawrence also commented “... but they [thresholds] should be approached with great caution.”

Additionally, quantitative targets or goals imply some unknown acceptable level or acceptable change in an indicator. However, the definition of what is acceptable will depend on the value system of those persons setting the targets and defining ‘acceptable’. According to Dr. David Lawrence, “significance determinations are especially subjective for social and economic impacts because they are filtered through multiple values, beliefs and perspectives, and are highly dependent on context.”⁴ For example, in the area of housing impacts, different stakeholders and groups with differing cultural or family backgrounds may define ‘acceptable’ levels of crowding differently. This makes setting targets very challenging and setting such targets may be erroneous or misleading.

The GNWT strongly recommends the removal of the word “target”, which implies quantitative targets, in section 13 of the Terms of Reference. The GNWT suggests the substitution of ‘goal(s)’ for ‘targets’ as more appropriate in that a goal can be both quantitative and

³ Lawrence, David P. 2004. *The Significance of Social and Economic Impacts in Environmental Assessment*. Research Supported by the Canadian Environmental Assessment Agency's Research and Development Program. http://www.ceaa-acee.gc.ca/015/001/023/print-version_e.htm#3_3

⁴ Lawrence, David. 2005. *Significance Criteria and Determination in Sustainability-Based Environmental Impact Assessment*. Final Report Prepared for Mackenzie Gas Project Joint Review Panel.

qualitative. As an alternative, the Proponents could be directed to apply the groupings as outlined by Dr. Lawrence.

Health and Community Wellness, Socio-cultural Patterns

Reference: TOR Appendix A Table 1
TOR Appendix B
TOR 13.4

The GNWT's Department of Health and Social Services does not have specific concerns about the Project given that a road currently exists during the winter months between Inuvik and Tuktoyaktuk, furthermore it is not expected that the Project will have a significant impact on the communities.

Under the TOR 13.4 it states "Include information on the following: ... Promoting activities and programs that increase community stability and wellness." The GNWT requests this statement be deleted from the TOR as this matter is properly the roles of other parties.

Under Appendix A, Table 1 the TOR states the goal of Communities is to "Minimize or avoid negative impacts to local communities throughout all phases of the proposed development". The TOR provides specifics on this goal statement under Health and Community Wellness (p60) and Socio-cultural Patterns (p61) where a significant list of requirements are listed that have limited relevance to the Project. The GNWT requests that the Review Board consider the goal statement of Communities (identified in Table 1) suffice to meet the Health and Community Wellness and Socio-cultural concerns relevant to the Project.

Referring to the attached Appendix A the GNWT provides a summary to the Review Board of the currently available baseline Human Environment data. Many criteria listed do not have quantitative data available and a number call for information that could seem prejudicial to the cultural perceptions of these matters. A broader requirement that enables the Proponents to provide baseline for relevant VCs including those that are monitored by the GNWT or other parties would provide greater relevance to the assessment process.