

# **Government of Canada Response to the Panel Report on the Proposal to Construct the Inuvik to Tuktoyaktuk Highway**

April 4, 2013

## **The Project**

The Hamlet of Tuktoyaktuk, the Town of Inuvik, and the Government of the Northwest Territories Department of Transportation (collectively referred to as “the Developer”), are proposing to construct, operate and maintain a 140-kilometre all-weather highway from the Hamlet of Tuktoyaktuk to the Town of Inuvik in the Northwest Territories (the Project or ITH project).

The construction of the Project would result in diverse regional developments and economic benefits. The Project would constitute the first all-weather road connection to the Arctic coast, providing year round overland access to Tuktoyaktuk. The Project is expected to generate economic and social opportunities for the region including decreasing the cost of living in Tuktoyaktuk by enabling goods to be transported year round, providing more opportunities for business development and expansion, reducing the cost of oil and gas exploration, and supporting Canada’s national security and sovereignty objectives. Canada would be connected from coast to coast to coast.

The Inuvik to Tuktoyaktuk corridor is located entirely within the zone of continuous permafrost requiring construction to take place almost exclusively during the winter months.

The scope of the Project for environmental assessment purposes included the following components:

- an all-weather highway from Inuvik to Tuktoyaktuk (entirely in the Inuvialuit Settlement Region);
- watercourse crossing structures;
- borrow and quarry areas to support construction, operations and maintenance requirements;
- construction staging areas;
- maintenance areas;
- temporary construction camp facilities;
- temporary construction access roads; and
- ongoing operations of the all-weather highway.

The Project would be located entirely within the Inuvialuit Settlement Region. Just over half of the alignment would be located on Inuvialuit private lands which are regulated and administered by the Inuvialuit Land Administration. The remainder of the route would be located on Crown lands regulated and administered by Aboriginal Affairs and Northern Development Canada (AANDC).

## **Federal Regulatory Approvals and Involvement**

Approvals may be required under Part 1, Section 5 of the *Navigable Waters Protection Act* from Transport Canada (TC) for any works built in, on, over, under, through or across any navigable waterway.

Authorizations may be required from Fisheries and Oceans Canada (DFO) under paragraph 35(2)(b) of the *Fisheries Act* for the harmful alteration or disruption, or the destruction of fish habitat and under paragraph 32(2)(c) for the killing of fish by any means other than fishing.

Land use permits and quarry permits on federal crown lands are required from AANDC under the authority of the *Territorial Lands Act*. The Minister of AANDC may be required to approve water licences under the authority of the *Northwest Territories Waters Act*.

As per Budget 2011, the Government of Canada has committed to providing funding towards the Project. The road is to be completed in collaboration with the Government of the Northwest Territories, the private sector, Inuvialuit Regional Corporation and local communities. Infrastructure Canada will administer the funding.

## **The Environmental Assessment Process**

The Project is subject to the environmental assessment processes of both the Inuvialuit Final Agreement (IFA) and the former *Canadian Environmental Assessment Act*, S.C. 1992 c.37 (CEAA). Under the former CEAA, Transport Canada (TC), DFO, AANDC and Infrastructure Canada (INFC) are considered Responsible Authorities (RAs) and Environment Canada (EC), Natural Resources Canada (NRCan), Health Canada (HC) and Parks Canada Agency (PCA) are all considered expert Federal Authorities (FAs).

Pursuant to the IFA, on April 27, 2010, the Environmental Impact Screening Committee (EISC) referred the Project to the Environmental Impact Review Board (EIRB) under the IFA on the grounds that the proposed development had the potential for significant negative impacts on the environment and on Inuvialuit harvesting due to the potential for cumulative impacts.

An assessment under the former CEAA was triggered by the potential for federal funding of the Project and due to the federal authorizations that might be required to allow the Project to proceed. On September 27, 2010, in order to avoid duplication, the Minister of the Environment announced the referral of the Project to a federal review panel under the former CEAA and that the federal process would be substituted by the EIRB public review process.

On March 2, 2011, the substituted process was established through an “Agreement to Establish a Substituted Panel for the Inuvik to Tuktoyaktuk Highway Project”

(Substitution Agreement) between the Minister of Environment and the Chair of the EIRB. The Substitution Agreement required that the review include:

- a consideration of the environmental effects of the Project (including malfunctions or accidents and cumulative effects) and the significance of these effects;
- comments from Aboriginal people and the public received during the review;
- mitigation measures;
- the purpose of and need for the Project, alternatives to the Project and alternative means of carrying out the Project;
- the need for and requirements of any follow-up programs;
- the capacity of renewable resources that are likely to be significantly affected to meet the needs of the present and those of the future;
- terms and conditions necessary to minimize any negative impact on wildlife harvesting; and,
- an estimate of the potential liability of the Project, determined on a worst case scenario.

Under the former CEAA, and through the Substitution Agreement, the EIRB standard review process was deemed to satisfy any requirements of the former CEAA in respect of assessment by a review panel.

The EIRB developed Terms of Reference for the preparation of an Environmental Impact Statement (EIS) to provide direction to the Developer on what to include. The EIS was filed by the Developer on June 7, 2011, and additional information was submitted by the Developer during the technical review process. Various opportunities for public participation by registered Parties and the public were provided during the review process, including a technical session in Inuvik on August 22-23, 2012.

Subsequently, the EIRB appointed a five-member Panel to complete the environmental impact review of the Project. Further information and recommendations were received from registered Parties, community representatives, Elders, and members of the public throughout the review. The Panel held four days of public hearings in Inuvik and Tuktoyaktuk from September 18-24, 2012 to solicit input from community members and to enable further examination of the issues by registered Parties. All RAs participated in the technical sessions and the public hearings. In addition, PCA, EC and NRCan participated as expert FAs.

The Panel considered the input received through written submissions and the public hearings and prepared the Substituted Review Panel Report (Panel Report).

### **Aboriginal Crown Consultation**

The Government of Canada has a legal duty to consult with and, where appropriate, accommodate Aboriginal groups before making a decision that may have adverse impacts on potential or established Aboriginal and/or Treaty rights. RAs, competent government authorities, and other participating agencies worked together to develop a coordinated

approach to Crown consultation, with the Northern Projects Management Office acting as the Crown Consultation Coordinator.

The Government of Canada's approach to Crown consultation and, where appropriate, accommodation, is to rely on, to the extent possible, existing mechanisms as the primary means for consulting with Aboriginal groups and collecting information on Project related impacts to potential or established Aboriginal or Treaty rights.

With respect to this Project, the Government of Canada chose to rely on the EIRB public review process as the primary consultative mechanism to discharge Canada's consultation obligations because the Project was scoped entirely within the Inuvialuit Settlement Region (ISR), which region is subject to the IFA. The EIRB assessment process is the consultative mechanism set out in the IFA for reviewing development impacts.

The Government of Canada participated as a registered party to the EIRB environmental assessment and review proceedings, following up directly with potentially affected Aboriginal groups, namely the Inuvialuit Regional Corporation and the Gwich'in Tribal Council through notification and follow-up letters and other correspondence, to encourage both their early engagement in the EIRB review process, as well as to confirm whether their concerns had been addressed through the process.

The Government of Canada approach also included a comprehensive review and analysis of the information generated by the EIRB's review process and its own engagement activities to determine whether the Developer, EIRB and RA responses adequately addressed the concerns raised by Aboriginal groups. This analysis also considered whether Developer commitments and regulatory instruments to be issued subsequent to a course of action decision would contribute to adequately addressing the Aboriginal concerns raised.

Finally, the Government of Canada considered the relevant statutory provisions of the IFA and the Gwich'in Comprehensive Land Claim Agreement (1992), with respect to understanding how these two agreements vest authority and capacity in their respective Aboriginal groups' implementing bodies to manage those project-related impacts that might occur within their respective settlement areas.

### **The Substituted Review Panel Report**

On January 25, 2013, the Panel submitted their Panel Report for the Project to the Government of Canada. The Panel Report sets out the decision and recommendations of the EIRB established under the IFA to complete a review of the proposed Project.

The Panel Report concluded that the Project should proceed as the regional and national economic and socio-economic benefits were found to outweigh the potential risk of significant environmental impacts. This is subject to the commitments made by the Developer and mitigation measures recommended by the Panel.

The Panel makes 51 recommendations, 25 of which are directed at the Government of Canada. The remaining recommendations are directed at the Developer, an Inuvialuit co-management body, the Government of Northwest Territories, or to no party in particular.

The Panel Report indicates that the Project will impact habitat and wildlife species including caribou and grizzly bear. The Panel determined that impacts will result from construction and aggregate extraction activities including impacts on the sensitive terrain crossed by the Project. The Panel recommends that these impacts, along with any potential impacts to the Husky Lakes, be carefully mitigated, monitored and managed. The Panel's review of the environmental components of the Developer's EIS led to concern about the quality of this assessment and the certainty of the impact predictions made by the Developer. In order to address these concerns the Panel recommends adoption of an adaptive management approach.

The Panel recommends the establishment of an Independent Environmental Monitoring and Oversight Committee (IEMOC) in order to provide oversight on all aspects of environmental management and to provide a vehicle for community involvement in Project monitoring activities. The Panel foresees the IEMOC as overseeing the Developer's performance in meeting its commitments, and overseeing the design and implementation of a comprehensive Environmental Monitoring and Management Plan, which would be integrated into an adaptive management framework, in order to mitigate Project impacts.

The Government of Canada's response to these recommendations is included below under 'Response to Recommendations'.

### **Government of Canada Conclusions under CEAA and the IFA**

The response to the Panel Report and its recommendations to the Government of Canada are addressed through this federal response pursuant to the former CEAA and pursuant to the IFA.

In preparing this Government of Canada Response, INFC, DFO, TC and AANDC, as RAs under the former CEAA and competent government authorities under the IFA, and EC, NRCan, HC and PCA as expert FAs under the former CEAA, carefully reviewed and considered the Panel's recommendations as well as comments submitted by Aboriginal groups and other stakeholders during and following the review process.

Taking into consideration the Panel Report and the implementation of mitigation measures that are considered appropriate, the Government of Canada has determined that the Project is not likely to cause significant adverse environmental effects and has outlined the terms and conditions that will be included in regulatory or funding instruments as appropriate.

## **Course of Action Decisions under the CEAA**

Paragraph 37(1.1)(c) of the former CEAA stipulates that the course of action of RAs be in conformity with the approval of the Governor in Council. Pursuant to subsection 37(1), if the Project is not likely to cause significant adverse environmental effects, the RAs may exercise any power or duty that would permit the Project to be carried out, in whole or in part.

INFC may also provide funding to enable the Project to proceed, in whole or in part. DFO and TC may issue any paragraph 35(2)(b) and paragraph 32(2)(c) *Fisheries Act* authorizations and any Part 1, Section 5 of the *Navigable Waters Protection Act* approvals associated with the Project, respectively. AANDC may issue any land use permits and quarry permits under the authority of the *Territorial Land Use Regulations* and the *Territorial Quarrying Regulations* respectively, and may approve any water licences requiring ministerial approval under the authority of the *Northwest Territories Waters Act*.

Under subsection 37(2.2) of the former CEAA, RAs are required to ensure the implementation of mitigation measures. Similarly, under subsection 38(2) of the former CEAA, the RAs will ensure the implementation of a follow-up program that verifies the accuracy of the predictions made in the environmental assessment and the effectiveness of the mitigation measures.

## **Decision under the IFA**

Paragraph 11(32) of the IFA stipulates that the competent governmental authority is required to consider the recommendations of the EIRB. Based on this consideration and in consideration of the environmental impacts of the Project, the competent government authority, will decide whether or not the Project should proceed and, if so, on what terms and conditions.

Consequently, the competent government authorities (INFC, TC, DFO and AANDC) have decided to allow the Project to proceed and have identified the terms and conditions in the Government Response to the Panel's recommendations.

## **Interpreting the Government Response**

The Government Response is designed to satisfy the conditions surrounding the Government of Canada's duty to respond to the Panel's recommendations, under both the IFA and the CEAA. The Government Response uses the terminology "accept", "accept the intent" and "reject" to respond to the Panel's 51 recommendations.

Where the Government Response indicates "accept" for a recommendation, it means that the Government of Canada fully approves the recommendation and agrees to implement it as written. Where the Government Response indicates "accept the intent" for a recommendation, the Government of Canada agrees with the underlying spirit of the

recommendation but cannot implement it as written in the Panel Report. Lastly, where the Response indicates “reject” for a recommendation, this means that the recommendation will not be implemented by the Government of Canada.

As per the conditions of the IFA, recommendations for which the Government Response indicates “accept” or “accept the intent” will be considered as terms and conditions set out for the Project’s implementation. These terms and conditions will be included in regulatory or funding mechanisms as applicable.

## **Response to Recommendations**

### **Follow-up Program and Independent Oversight**

Recommendation R01 – The Responsible Authorities shall establish a follow-up program for the ITH project, the results of which can be integrated with both project oriented and regional, government-led cumulative effects monitoring, mitigation and adaptive management programs for the ISR.

Recommendation R02 – An oversight body, the Independent Environmental Monitoring and Oversight Committee (IEMOC), independent of the Developer, shall be established to coordinate the monitoring, mitigation and adaptive management of the ITH project’s construction and operation.

Recommendation R03 – Membership on the IEMOC shall include the Developer (2 members) including a representative from ENR, AANDC, NWT Water Board, DFO, EC, NRCan, INFC, WMAC, FJMC, ILA and the HTC’s from Inuvik and Tuktoyaktuk. It should be co-chaired by the Developer and one of the Inuvialuit co-management committees. The IEMOC may establish subcommittees in order to make its operations more efficient.

Recommendation R04 – The IEMOC shall be established as soon as possible and before major construction activities begin and shall operate for the construction period and no more than 10 years of highway operations, unless an extension is agreed to by its parties. The level of IEMOC activity shall be scalable in relation to the level of construction and operational activities and impacts related to the ITH project.

Recommendation R05 – Government participation on the IEMOC shall be paid for by the departments involved. The cost for co-management bodies and Inuvialuit institutions such as HTC’s to participate shall be paid for by the Developer. Any studies and analyses required to monitor, manage and respond to ITH project effects shall be paid for by the Developer. Basic secretariat costs for IEMOC shall be paid for by the Developer. A budget shall be developed in advance of each year’s operations.

Recommendation R06 – The IEMOC shall be established by its Parties, including representatives of the Developer, Canada, the Joint Secretariat (for WMAC and FJMC), the HTC’s and ILA by way of a collaboratively developed legal agreement which sets out

the purpose, membership, funding and governance arrangements amongst these parties, consistent with the Panel's recommendations.

Recommendation R07 – Development of the IEMOC agreement shall begin within 30 days of Ministerial approval of the Panel's report. This agreement must be in place before major construction activities begin. The Developer shall pay the negotiation costs of the Joint Secretariat and HTC's.

### **Monitoring and Adaptive Management**

Recommendation R08 – A project specific monitoring, mitigation and adaptive management program shall be developed for the ITH project by the IEMOC (the ITH Adaptive Management Program).

Recommendation R09 – The ITH Adaptive Management Program shall be in place before major construction activities are initiated for the project.

Recommendation R10 – The IEMOC shall ensure that its Adaptive Management Program includes:

- \* the integration of science and Traditional Knowledge into programs to monitor ITH project performance relative to the Developers' impact assessment predictions;
- \* provision for modification of any monitoring and mitigation programs based on observed VEC responses; and
- \* the publication and periodic distribution of monitoring and adaptive management results to keep Inuvialuit communities and the public apprised of the adaptive management activities related to highway construction and operation, and to ensure that ITH monitoring and mitigation results are integrated with and contribute to regional cumulative effects monitoring programs.

Recommendation R11 – Any follow-up program established by Responsible Authorities shall recognize the role of the IEMOC and provide for collaboration and cooperation between these groups and their programs.

Recommendation R12 – The IEMOC's Adaptive Management Program shall consider the need to address monitoring of permafrost and granular resources, surface hydrology, vegetation, fish, wildlife, and harvesting impacts to address concerns raised in this proceeding. The final scope of this program and any future changes to it shall be an IEMOC decision.

Recommendation R13 – The IEMOC shall consider the Panel's Recommended Activities in the development of the agreement referred to in Recommendation R06.



### *Response to Recommendations R01 - R13*

The Government of Canada rejects the recommendation to establish the Independent Environmental Monitoring and Oversight Committee (IEMOC). Hence, any recommendation that refers to the IEMOC cannot be fully accepted. The Government of Canada accepts the intent of recommendations 1 through 13 and modifies them as set out below.

The Government of Canada is of the opinion and agrees with the Panel that a collectively coordinated and collaborative approach to managing the Project is integral to its success. However, in order to avoid duplication and prevent undue burden on parties in regulation and oversight, the Government of Canada is of the opinion that an independent oversight body as recommended by the Panel is not required. The Government of Canada agrees with the Panel that it is “essential that any mechanism established to serve these functions be structured and operated in a manner consistent with and which does not conflict with the co-management framework established by the IFA for the management of the environment in the ISR”<sup>1</sup>. The Government of Canada does not believe that the proposed IEMOC would meet these criteria. Further, the Government of Canada notes that the GNWT does not accept the need for the IEMOC. Instead, the GNWT proposes the use of existing mechanisms and a collaborative working group to meet the intent of the Panel recommendations.

The Government of Canada believes that it is crucial that an efficient and effective use of existing mechanisms occurs across government to ensure the Project is implemented in a responsible manner and with appropriate focus on mitigation, monitoring, follow-up and adaptive management. The Government of Canada is of the opinion that sufficient oversight would be provided through a combination of the Developer’s commitments and the use of existing mechanisms which include, but are not necessarily limited to: 1) federal regulatory instruments; 2) a follow-up program for the project; 3) the Northwest Territories Cumulative Impact Monitoring Program; and 4) the five co-management bodies established under the IFA. Further, there are a number of project- and topic-specific working groups both established and proposed to ensure appropriate mitigation and monitoring for sensitive biophysical components.

A follow-up program is a requirement under the former CEAA to verify the accuracy of the predictions made in the environmental assessment and to determine the effectiveness of the mitigation measures for this Project. The RAs, with the assistance of FAs as required, will design and ensure the implementation of a follow-up program that will consider the need to address, where appropriate, monitoring of the potential impacts on any of the following: permafrost and granular resources, surface hydrology, vegetation, fish, wildlife, and harvesting.

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<sup>1</sup> FINAL REPORT of the Panel for the Substituted Environmental Impact Review of the Hamlet of Tuktoyaktuk, Town of Inuvik and GNWT - Proposal to Construct the Inuvik to Tuktoyaktuk Highway  
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Federal departments with regulatory decisions and relevant technical expertise will be involved in monitoring, mitigation and adaptive management. The Government of Canada recommends that a Project specific monitoring, mitigation and adaptive management program that is consistent with all of the relevant commitments made by the Developer should be developed for the Project by the Developer and submitted to the relevant parties for review and approval. Further, the adaptive management program should be linked to the follow-up program, as appropriate. The RAs, with assistance from FAs as appropriate, are committed to ensuring the monitoring plans do not exist in isolation from each other. The Government of Canada notes that the Adaptive Management Program may include other elements in addition to those specified in recommendation R10.

The Government of Canada endorses the Developer's commitment to invite interested agencies, organizations, and co-management groups in order to establish the Inuvik to Tuktoyaktuk Highway Corridor Working Group to report on construction progress and to review outcomes of the multiple environmental management and monitoring plans (commitment #218). The Government of Canada recommends that this body be used as a mechanism through which the Developer can, and should, make a significant contribution to meeting the overall requirement for mitigation, monitoring, follow-up, adaptive management, communication and reporting with respect to the Project. Infrastructure Canada will require, at a minimum, that the Developer use this group as a means to communicate and report broadly to all interested parties, including Inuvialuit and Gwich'in communities and the public, on the Project on a bi-annual basis, at a minimum.

The Government of Canada also endorses the Developer's commitments to continue working closely and communicate regularly with the Inuvialuit Land Administration (ILA), the Tuktoyaktuk and Inuvik Hunters and Trappers Committees (HTCs), the Fisheries Joint Management Committee (FJMC), the Tuktoyaktuk to Inuvik Working Group (TIWG), the Wildlife Management Advisory Council (WMAC) as well as the Government of Canada on topic-specific sub working groups.

The Government of Canada supports the development of a terms of reference detailing how a collaborative approach to monitoring using existing and planned mechanisms would work and identifying how key Parties would be engaged. Infrastructure Canada will commit to engage with the Developer within 30 days of the Governor in Council decision statement on the development of such terms of reference.

The Government of Canada is prepared to cover its own costs to participate on this working group. Individual federal departmental participation will be determined by departmental mandate and will occur on an "as required" basis. The Government of Canada endorses the Developer's commitment to providing reasonable financial support for co-management bodies and Inuvialuit institutions in the corridor and topic-specific working groups. Moreover, the Government of Canada endorses the numerous commitments on the part of the Developer to undertake studies and analyses to monitor, manage and respond to Project effects.

## **Economic**

**Recommendation R14** – The Developer shall work with local academic institutions in the design of short duration, skill-based training courses for Inuvialuit beneficiaries and other northern residents to improve job readiness, expand the available labour pool, and enhance local skill capacity. To the extent possible these courses shall be available before the initiation of major construction activities.

**Recommendation R15** – The Developer shall require its contractors to report on training, including the types of training provided and the number of employees trained, and make the information public.

**Recommendation R16** – The Developer shall publish updates on the numbers of Inuvialuit and northern businesses that have received project-related contracts, as well as relevant details regarding the contracts.

**Recommendation R17** – The Developer and its contractors shall provide updates to the public regarding the numbers of individuals from Tuktoyaktuk and Inuvik who have been hired, the types of positions they have been hired for, and total wages paid.

**Recommendation R18** – Responsible parties (ITI, IRC, IDC) shall examine changes in tourism as a result of the project, and

- \* identify potential or additional economic opportunities that could be filled by Inuvialuit businesses; and
- \* assist Inuvialuit businesses, both existing and potential, to take advantage of opportunities related to increased tourism.

## **Community**

**Recommendation R19** – The Developer, GNWT departments and service agencies shall make use of the Inuvialuit Indicators Project to assist in monitoring the potential impacts of the project on individuals and the communities of Inuvik and Tuktoyaktuk.

### **Response to Recommendations R14 - R19**

The Government of Canada notes that recommendations 14 through 19 are directed at the Developer. The Government of Canada accepts the intent of these recommendations and Infrastructure Canada will require that the Developer address R14 and work with local academic institutions as recommended by the Panel. In addition, the Developer shall address R19 and monitor the impacts of the Project as recommended by the Panel. Moreover, with regard to R15, R16, R17 and R18, the Developer shall prepare, publish and disseminate to Inuvialuit and Gwich'in communities and to the public, a report indicating the benefits achieved through construction and use of the Project, including economic benefits realized by the Inuvialuit, the Gwich'in and residents of Tuktoyaktuk and Inuvik.

## **Land Use, Access and Harvesting**

**Recommendation R20** – The Developer shall work with the Parties (DFO, EC, ENR) and co-management bodies (FJMC, WMAC) and HTC's to ensure that the Developer's mitigation, monitoring and management commitments related to wildlife, fish and harvesting are met and reported on annually through IEMOC or through the specific co-management bodies responsible for resource management in the ISR.

### **Response to Recommendation R20**

The Government of Canada notes that this recommendation is directed at the Developer. The Government of Canada accepts the intent of the recommendation and modifies it such that the results of monitoring would be met and reported on through a combination of regulatory instruments, the follow-up program and specific co-management bodies responsible for resource management in the Inuvialuit Settlement Region. DFO will continue to work closely with co-management bodies such as the Fisheries Joint Management Committee and the Tuktoyaktuk to Inuvik working group to manage fisheries resources in the Inuvialuit Settlement Region. DFO will ensure that the mitigation measures as well as monitoring and management plans required under any potential *Fisheries Act* authorizations are met through standard compliance monitoring and enforcement. Environment Canada will continue to work closely with co-management bodies such as the Wildlife Management Advisory Council to manage wildlife resources within their departmental mandate. The Government of Canada will work with other appropriate parties, as required, to monitor implementation of the Developer's commitments related to mitigation, monitoring and management for wildlife, fish and harvesting.

## **Caribou**

**Recommendation R21** – The Developer shall monitor project-specific effects on caribou and work in collaboration with existing or planned regional caribou monitoring programs by government including the following:

- \* compare baseline caribou habitat amount to Project construction and operations phase habitat amounts (verify prediction for amount of caribou habitat lost to Highway);
- \* complete statistical power analyses to determine appropriate sample size for caribou collaring program;
- \* compare baseline caribou movement to Project construction and operations phase movements using radio collar data;
- \* compare baseline caribou distribution to Project construction and operations phase distributions using radio collar data (verify predicted ZOI of 1 km);
- \* compare baseline caribou habitat use to Project construction and operations phase habitat use using radio-collar data (verify prediction for habitat degradation);
- \* compare baseline caribou harvest rates to Project construction and operations phase harvest rates; and

- \* compare baseline caribou collision-based mortality rates to pre-defined thresholds.

#### Response to Recommendation R21

The Government of Canada notes that this recommendation is directed at the Developer. The Government of Canada accepts the intent of the recommendation and will work with the Developer and appropriate parties, as required, where opportunities exist to integrate the results of project-specific monitoring with existing or planned regional caribou monitoring programs.

#### **Grizzly Bear**

Recommendation R22 – The Developer shall complete the development of a WEMP in collaboration with the parties to the IEMOC as part of an adaptive management process.

#### Response to Recommendation R22

The Government of Canada notes that this recommendation is directed at the Developer. The Government of Canada accepts the intent of the recommendation and modifies it such that a Wildlife Effects Monitoring Program (WEMP) should be established by the Developer in collaboration with the participants of the Inuvik to Tuktoyaktuk Highway Corridor Working Group. The Government of Canada will work with the Developer and appropriate parties, as required, to provide expertise in support of the establishment of the WEMP.

Recommendation R23 – The Developer shall determine presence or absence of bear dens in construction areas with pre-construction surveys.

#### Response to Recommendation R23

The Government of Canada notes that this recommendation is directed at the Developer. The Government of Canada accepts the intent of the recommendation and will work with the Developer and appropriate parties, as required, to ensure its implementation.

Recommendation R24 – The Developer shall monitor project-specific effects on grizzly bear and collaborate with existing or planned regional grizzly bear monitoring programs by government including the following:

- \* compare baseline grizzly bear movement to Project construction and operations phase movements using radio collar data;
- \* compare baseline grizzly bear habitat use to Project construction and operations phase habitat use using radio-collar data (verify prediction for habitat degradation);
- \* compare baseline grizzly bear harvest rates to Project construction and operations phase harvest rates;
- \* compare baseline grizzly bear collision-based mortality rates to pre-defined

- thresholds; and
- \* compare baseline grizzly bear denning frequency within or near the road corridor to Project construction and operations phase denning frequency (verify predicted ZOI of 500 m).

#### *Response to Recommendation R24*

The Government of Canada notes that this recommendation is directed at the Developer. The Government of Canada accepts the intent of the recommendation and will work with the Developer and appropriate parties, as required, where opportunities exist to integrate the results of project-specific monitoring with existing or planned regional grizzly bear monitoring programs.

### **Muskrat**

**Recommendation R25** – The Developer shall complete pre-construction surveys for muskrat push-ups on lakes where winter snow removal and/or winter water withdrawal will take place.

#### *Response to Recommendation R25*

The Government of Canada notes that this recommendation is directed at the Developer. The Government of Canada accepts the intent of the recommendation and will work with the Developer and appropriate parties, as required, to ensure its implementation.

**Recommendation R26** – The Developer shall follow mitigation measures set out in permits issued under the Wildlife Act and monitor mitigation success, if muskrats are present.

#### *Response to Recommendation R26*

The Government of Canada notes that this recommendation is directed at the Developer. The Government of Canada accepts the intent of the recommendation and will work with the Developer and appropriate parties, as required, to ensure its implementation.

### **Reindeer**

**Recommendation R27** – AANDC shall address and resolve any potential land use conflicts before issuing land tenures for the highway.

#### *Response to Recommendation R27*

The Government of Canada accepts the intent of this recommendation and notes that it is directed at AANDC. However, the Government of Canada would like to clarify that no land tenures will be issued for the Project because the Project once constructed and commissioned as a public highway will devolve to the GNWT under the *Northwest*

*Territories Act.* Any land use conflicts will be addressed through the appropriate regulatory permitting processes associated with land use permits.

Recommendation R28 – With respect to private lands, the ILA shall initiate dialogue between the reindeer herd owner and the Developer and assist with conflict resolution as necessary.

*Response to Recommendation R28*

The Government of Canada notes that this recommendation is directed at the Inuvialuit Land Administration.

**Fish and Fish Habitat**

Recommendation R29 – The Developer shall consult with both DFO and AANDC to determine appropriate mitigation measures before using a chemical dust suppressant technique on the ITH.

*Response to Recommendation R29*

The Government of Canada accepts the intent of this recommendation and notes that it is directed at the Developer. The Government of Canada supports the need to manage the use of chemical dust suppressants and would like to note that EC, TC, DFO, AANDC and the Northwest Territories Water Board have overlapping jurisdiction with respect to the management of this matter. The Developer shall consult with these departments to determine appropriate mitigation measures before using a chemical dust suppressant technique on the Project. The Government of Canada will work with the Developer and other appropriate parties to promote compliance with relevant legislation and to provide advice on proposed mitigation measures related to chemical dust suppressant techniques.

Recommendation R30 – The Developer shall, prior to construction, develop management plans for the protection of fish and fish habitat in any areas affected by construction in collaboration with DFO, and the Tuktoyaktuk and Inuvik HTC's and FJMC.

*Response to Recommendation R30*

The Government of Canada notes that this recommendation is directed at the Developer and accepts its intent. As a participant in the co-management structure set out in the Inuvialuit Final Agreement, DFO will continue to work with the Fisheries Joint Management Council and Hunters and Trappers Committees on the management of fisheries resources in the Inuvialuit Settlement Region. DFO will ensure that the mitigation measures as well as monitoring and management plans required under any potential *Fisheries Act* authorizations are met through standard compliance monitoring and enforcement.

Recommendation R31 – The Developer shall develop a long-term maintenance plan for the Hans and Zed Creek crossings to protect fish habitat.

*Response to Recommendation R31*

The Government of Canada notes that this recommendation is directed at the Developer and accepts its intent. DFO will work with the Developer with respect to crossing design details, fish habitat compensation, mitigation measures and monitoring to address the information requirements necessary to make a regulatory decision and issue potential authorizations under paragraph 35(2)(b) of the *Fisheries Act*. If the crossings are properly designed, long-term maintenance to protect fish and fish habitat may not be required.

**Species at Risk**

Recommendation R32 – The IEMOC shall determine appropriate setback distances for bear denning areas and critical habitat of SAR, waterfowl and tundra-nesting bird species.

*Response to Recommendation R32*

The Government of Canada accepts the intent of this recommendation. The Government of Canada expects the Developer to work with parties to determine appropriate setback distances for bear denning areas, nests of bird species at risk, waterfowl and other tundra-nesting bird species under the umbrella of the follow-up program and through the development of the WEMP. The Government of Canada notes that regulatory authorities may have the ultimate discretion to determine setbacks where they may be included as conditions in permits or authorizations issued for the Project. The Government of Canada would also like to clarify that critical habitat as defined in the federal *Species at Risk Act* has not been identified for any of the species at risk that may occur in the area proposed for development of the Project. Although critical habitat has been defined in the recovery strategy for boreal woodland caribou, the proposed Project corridor and associated borrow pits do not overlap with the Northwest Territories boreal caribou range as identified in the recovery strategy. The Government of Canada will work with the appropriate parties to meet the intent of this recommendation, as required.

Recommendation R33 – The Developer shall monitor project-specific effects and collaborate in the monitoring of regional effects on all identified SAR, such as boreal woodland caribou, grizzly bears, and wolverines, with existing or planned regional monitoring programs by government including:

- \* compare baseline species habitat amount to Project construction and operations phase habitat amounts (verify predictions for habitat loss);
- \* compare baseline species habitat use to Project construction and operations phase habitat use (verify predictions for habitat degradation);
- \* compare baseline species distribution to Project construction and operations phase distributions (verify predictions for disturbance);
- \* compare baseline species harvest rates to Project construction and operations phase harvest rates (verify predictions for mortality); and



- \* compare baseline caribou collision-based mortality rates to pre-defined thresholds (verify prediction for mortality).

#### *Response to Recommendation R33*

The Government of Canada notes that this recommendation is directed at the Developer and accepts its intent. The Government of Canada further notes that boreal woodland caribou, grizzly bears and wolverines are primarily the jurisdiction of the Government of Northwest Territories. The Government of Canada will work with the Developer and appropriate parties, as required, where opportunities exist to integrate the results of project-specific monitoring with existing or planned regional species at risk monitoring programs.

### **Water Use and Winter Access Roads**

#### **Total Water Requirements**

Recommendation R34 – The 10 per cent water withdrawal limit contained in the DFO Protocol for Winter Water Withdrawal from Ice-covered Waterbodies in the Northwest Territories and Nunavut (2010) shall be applied to every lake and water body used as a water source over the lifetime of the project.

#### *Response to Recommendation R34*

The Government of Canada accepts this recommendation. The Developer has committed to using DFO's "Protocol for Winter Water Withdrawal from Ice-covered Waterbodies in the Northwest Territories" and other relevant guidelines. The Government of Canada notes that detailed information is not required for all waterbodies according to the protocol; however, location and quantities being withdrawn would still be required for each water source to determine compliance. This information requirement will be addressed through the Northwest Territories Water Board process.

#### **Winter Access Roads**

Recommendation R35 – Monitoring of the effects of long term water use for the construction of these roads shall be included in the regulatory approvals granted by DFO, AANDC and the NWT Water Board, as appropriate, and the results of this monitoring shall be integrated into the cumulative effects and adaptive management programs to be established by the IEMOC.

#### *Response to Recommendation R35*

The Government of Canada accepts the intent of this recommendation. Currently, there is no program in place for the monitoring of long term water use; however, DFO will work with other parties as appropriate, including AANDC and the Northwest Territories Water Board, to ensure that impacts from water use are avoided and by providing expert advice

in the development of monitoring plans, coordinating monitoring efforts and sharing of information.

### **Terrestrial Impacts of Winter Access Roads**

Recommendation R36 – AANDC and the NWT Water Board shall ensure that the same road alignments are not used to access aggregate sources every year in order to avoid the vegetation and terrain damage caused by repeated use.

#### **Response to Recommendation R36**

The Government of Canada accepts the intent of this recommendation and notes that it is directed at AANDC and the Northwest Territories Water Board. The Government of Canada understands the intent of this recommendation is to reduce the damage to vegetation and terrain from repeated use of winter access roads. AANDC, as a regulator of land-use activities, has the ability to manage this activity on a case-by-case basis, and will work with the Northwest Territories Water Board and the Developer to ensure the appropriate management of winter road alignment.

Recommendation R37 – The Developer shall develop a monitoring program with respect to vegetation and terrain that includes active layer and near-surface permafrost impacts from winter road construction to the aggregate sources. Monitoring reports should be filed with the appropriate regulators, including AANDC, on a regular basis and not less than every two years, with particular emphasis on cumulative impacts of the roads on these terrain characteristics. This monitoring program and its results shall be integrated into the cumulative effects and adaptive management programs to be established by the IEMOC.

#### **Response to Recommendation R37**

The Government of Canada notes that this recommendation is directed at the Developer and accepts its intent. The Government of Canada agrees with the need for monitoring reports to be provided to the regulators, consistent with legislative and regulatory requirements, and will work with the Developer to determine the appropriate scope of a monitoring program with respect to vegetation and terrain.

### **Aggregate Resources**

Recommendation R38 – AANDC, ILA and the NWT Water Board shall require the filing of draft pit development plans with the Developer's applications for gravel extraction. These plans shall include conceptual closure and reclamation plans. These regulators shall require final pit development plans from the Developer before gravel extraction from the sites listed in Table 5 begins.

#### **Response to Recommendation R38**

The Government of Canada accepts this recommendation.

Recommendation R39 – The pit development plans shall address the effects of quarrying operations on vegetation, surface water, permafrost, wildlife and terrain features, and includes specific mitigation measures for consideration by the regulators. The Developer shall consult the HTC's of Inuvik and Tuktoyaktuk about these plans before they are approved by the regulators.

*Response to Recommendation R39*

The Government of Canada accepts this recommendation.

Recommendation R40 – Pit development licences or permits shall be based on and limited by the schedule of aggregate requirements provided by the Developer and presented in Table 5 of this report. After construction, further development of the pits should only be permitted once progressive reclamation of the original disturbance has been initiated and the ground surface is shown to be stable.

*Response to Recommendation R40*

The Government of Canada accepts the intent of this recommendation and notes that it is directed at AANDC and the Inuvialuit Land Administration. The Government of Canada accepts the progressive reclamation of pits, but notes the future development of pits should be determined by regulators and based on resource availability and site specific conditions.

Recommendation R41 – Any extra requirement for aggregate over and above the requirements forecast for specific time intervals in Table 5 of this report shall be considered as a new application and be subject to screening by the EISC.

*Response to Recommendation R41*

The Government of Canada notes that this recommendation is not directed to any particular party and accepts its intent. AANDC, as a regulator of aggregate resources on Crown land, assumes that the recommendation speaks only to an increased volume of aggregate production/use during the life cycle of the Project, and will regulate accordingly.

Recommendation R42 – AANDC and ILA shall require evidence of permafrost stabilization as part of the conditions for reclamation and closure of borrow pits, and until it is clear that permafrost has been re-established in the pit floors and slopes, the liability for the pits shall remain the responsibility of the Developer.

*Response to Recommendation R42*

The Government of Canada accepts this recommendation.

## **Climate Change**

**Recommendation R43** – As part of its applications for pit and quarry licences, the Developer shall provide to AANDC and ILA a rigorous and transparent quantitative assessment of the potential impacts of climate change on the aggregate needs for the project including estimates of aggregate needs 25 and 50 years after construction.

### **Response to Recommendation R43**

The Government of Canada notes that this recommendation is directed at the Developer and rejects the portion directed at AANDC. The Developer has already provided estimates of 20, 40 and 50 year aggregates needs in Table 5 of the Panel report. The additional information requested exceeds the standard requirements for quarry permit applications. The Government of Canada notes that the Developer has committed to follow the Transportation Association of Canada's 2010 publication titled “Guidelines for Development and Management of Transportation Infrastructure in Permafrost Regions”, which include consideration of potential impacts of climate change throughout the design process. The Government of Canada also notes, as outlined in its response to R41, that any additional requirement for aggregate due to climate change or otherwise will require a new application and rescreening by the EISC. Therefore, it is the Government of Canada’s view that it is unnecessary as part of an application for a quarry permit for the Developer to provide a rigorous and transparent quantitative assessment of the potential impacts of climate change on the aggregate needs for the project including estimates of aggregate needs 25 and 50 years after construction.

**Recommendation R44** – The Developer shall develop preliminary pit management plans, including a preliminary closure and reclamation plan, for all borrow sites and quarries listed in Table 5 and file them with AANDC, ILA and the NWT Water Board at the time applications are made for use of these areas. Approval of final pit management plans by regulators before aggregate extraction begins shall be a condition of any licences or permits when issued.

### **Response to Recommendation R44**

The Government of Canada notes that this recommendation is directed at the Developer and accepts its intent; however, the terms utilized in this recommendation require clarification to reflect that the owner of the resource manages the resource, whereas, the proponent or user develops the resource. Pit or Quarry Development Plans filed by the Developer should be consistent with the resource owner's Management Plan. AANDC, as the Minister responsible for the *Territorial Quarrying Regulations*, will require the submission of a Pit or Quarry Development Plan before issuing permits under the *Territorial Quarrying Regulations* on Crown Land.

**Recommendation R45** – The Developer's estimates of future quarry size (areal extent and volumes), based on its projected need for aggregate, and AANDC's independent opinion on the estimates shall be presented to the NWT Water Board during its water licensing

process to enable the development of water management plans and reclamation plans for quarries and borrow pits.

*Response to Recommendation R45*

The Government of Canada accepts this recommendation.

**Cumulative Effects Assessment**

Recommendation R46 – The Developer, in collaboration with GNWT-ENR, EC and wildlife comanagement organizations, working through the IEMOC, shall further develop and implement the proposed WEMP to ensure that it addresses both direct and cumulative effects from highway construction and operations on wildlife distribution and abundance within the regional cumulative effects study area.

*Response to Recommendation R46*

The Government of Canada notes that this recommendation is directed at the Developer and accepts its intent. The recommendation requires the Developer to collaborate with Government of Northwest Territories Department of Environment and Natural Resources, Environment Canada and wildlife co-management organizations. The Government of Canada believes that the WEMP can be developed and implemented as part of the follow-up program in such a way that it addresses direct effects from construction and operations on wildlife distribution and abundance and can contribute towards broader cumulative effects monitoring within the regional cumulative effects study area. The Government of Canada will work with the appropriate parties, as required, to ensure that the development and implementation of the WEMP meets the intent of this recommendation.

Recommendation R47 – The results of WEMP monitoring of cumulative effects on wildlife, vegetation and land use shall be integrated into the IEMOC's adaptive management framework, and, to the extent possible, into any government regional cumulative effects monitoring programs.

*Response to Recommendation R47*

The Government of Canada accepts the intent of this recommendation. However, the Government of Canada believes that the results of the WEMP monitoring of project-specific effects on wildlife, vegetation and land use could be integrated into an adaptive management framework formed under the umbrella of the follow-up program. The Government of Canada will work with the appropriate parties, as required, to ensure the results of the project-specific WEMP are integrated into any government regional cumulative effects monitoring programs to the extent possible.

## **Worst Case Scenario**

Recommendation R48 – The Panel finds that a worst-case scenario based on a fuel truck roll over on the highway as described in the EIS to be the appropriate scenario for this development. The Panel also finds that a total cost or value for this worst-case scenario is \$1.05 Million dollars.

### *Response to Recommendation R48*

The Government of Canada acknowledges the Panel's analysis regarding the identification of a worst-case scenario under the IFA and notes the Panel's findings that a fuel truck roll over on the highway is the most appropriate in this case.

Recommendation R49 – The Panel recommends that consideration be given to requiring security from the Developer in this amount in order to protect Inuvialuit harvester's rights pursuant to section 13 of the IFA.

### *Response to Recommendation R49*

The Government of Canada accepts the recommendation, has considered the issue and has decided that no security deposit is required as the project is a government project, subject to existing territorial regulations.

## **Husky Lakes**

Recommendation R50 – The Inuvialuit Land Administration shall work with the Developer, HTC's, FJMC and WMAC (NWT) to ensure proper signage and guidelines are established to monitor access to the Husky Lakes area.

### *Response to Recommendation R50*

The Government of Canada notes that this recommendation is directed at the Inuvialuit Land Administration.

## **Land Use and Management Category E Lands**

Recommendation R51 – Developer shall consult with the communities, HTC's and ISR comanagement boards on the development and content of the Project's environmental management plans in relation to Category E lands.

### *Response to Recommendation R51*

The Government of Canada notes that this recommendation is directed at the Developer and accepts its intent.