

**GOVERNMENTS OF CANADA & OF THE NORTHWEST TERRITORIES
FINAL RESPONSE TO THE JOINT REVIEW PANEL REPORT
FOR THE PROPOSED MACKENZIE GAS PROJECT**

November 2010

INTRODUCTION

The following document is the Governments of Canada and the Northwest Territories Final Response to the Report of the Joint Review Panel for the Mackenzie Gas Project entitled *Foundation for a Sustainable Future*. The Joint Review Panel released its Report on December 30, 2009 and concluded that, "...subject to the full implementation of the Panel's Recommendations, the adverse impacts of the Mackenzie Gas Project, and the associated Northwest Alberta Facilities would not likely be significant and that the Project and those facilities would likely make a positive contribution towards sustainability."

The Governments of Canada and the Northwest Territories have concluded that the Final Response meets the overall intent of the Joint Review Panel's Report and its recommendations and have concluded that implementing the Response would eliminate or mitigate any significant adverse impacts of the Mackenzie Gas Project.

The Governments' Response to the Joint Review Panel's Report is unique as it is the first time that a Response to an Environmental Impact Review has had to meet the combined statutory requirements of: The *Mackenzie Valley Resource Management Act* (MVRMA), the *Canadian Environmental Assessment Act* (CEAA) and the *Western Arctic (Inuvialuit) Claims Settlement Act*. The Response required approval under the MVRMA and the CEAA.

The National Energy Board will consider the Governments' Response prior to releasing its 'Reasons for Decision' on whether to issue the Certificate for Public Convenience and Necessity under the *National Energy Board Act* for the Mackenzie Valley Pipeline and the four other applied for authorizations respecting the Mackenzie Gas Project under the *Canada Oil and Gas Operations Act*.

Background

The Mackenzie Gas Project is a joint proposal by Imperial Oil Resources Ventures Limited, Shell Canada Limited, ConocoPhillips Canada (North) Limited, ExxonMobil, and the Aboriginal Pipeline Group, collectively known as the "Proponents". The Mackenzie Gas Project is a proposed investment in the Northwest Territories to develop three anchor fields (holding 6 trillion cubic feet of natural gas in the Mackenzie Delta), gathering lines, processing facilities and a 1,200 kilometre natural gas pipeline from Inuvik to northern Alberta. The pipeline would connect otherwise stranded natural gas resources in the Mackenzie Delta to markets in the rest of North America.

In August 2004, the Minister of the Environment, the Chairs of the Mackenzie Valley Environmental Impact Review Board and the Inuvialuit Game Council, representing the parties with environmental assessment responsibilities along the proposed project route, established a joint review panel under the *Agreement for an Environmental Impact Review of the Mackenzie Gas Project* (the Agreement). The Agreement established the seven-member, independent Joint Review Panel and the process that would be used to assess the potential social, cultural and environmental impacts of the proposed Mackenzie Gas Project.

In October 2004, the Proponents filed the Environmental Impact Statement with the Panel and the regulatory applications for the Mackenzie Gas Project with the National Energy Board.

Following an eight month information assessment by the Joint Review Panel and the interveners, the Panel announced that there was sufficient information to proceed to public hearings, which began on February 14, 2006. It was initially anticipated that the Joint Review Panel would issue its final report within ten months of the commencement of the public hearings. The hearings, which ended November 29, 2007, took place over 115 days across 26 northern communities and in Edmonton, Alberta. The Joint Review Panel released its report on December 30, 2009, twenty-five months after the hearings concluded.

Joint Review Panel's Report and the Governments' Response

The Joint Review Panel's Report *Foundation for a Sustainable Northern Future*, addresses the potential social, cultural and environmental impacts of the Mackenzie Gas Project. The report contained 176 recommendations to mitigate potential adverse impacts of the Project which were directed to federal departments, the National Energy Board, Proponents and the Governments of the Northwest Territories, Alberta and Yukon.

In the Response, the Governments have acknowledged the importance of the mitigation measures outlined by the Joint Review Panel in its Report. The responses support environmental mitigation ranging from permafrost and terrain monitoring, inspection and enforcement strategy for fish and fish habitat protection, plans for dredging and barge landings, recovery strategies and action plans for species at risk, habitat offsets in response to future development in the Kendall Island Bird Sanctuary, implementation of the Northwest Territories Protected Areas Strategy, to emergency response and spill prevention.

A central issue raised by the Joint Review Panel was the monitoring of cumulative impacts, follow-up and adaptive management practices. The Governments of Canada and the Northwest Territories agree with many of the Joint Review Panel's objectives in these areas as these are essential tools for ensuring the Project is implemented as planned and mitigation measures adjusted as appropriate over the life of the Project. For example, the Governments agree that the integrated resource management regime set out in the MVRMA provides the necessary foundation for the effective management of the Project. Governments also acknowledge that the NWT Cumulative Impact Monitoring Program will be instrumental in developing a collaborative approach to cumulative impacts management that is both project-specific and regional in scope. Furthermore, Governments will continue to work with the Inuvialuit Regional Corporation to implement a comparable initiative within the Inuvialuit Settlement Region. The Governments' approach to implementing the recommendations related to monitoring is outlined in the Response.

The Joint Review Panel made a number of recommendations concerning conservation and the need for a network of protected areas and regional land use plans. The Governments acknowledge the importance of conservation and land use planning as detailed in the Response and will continue to use established processes to meet the objectives of the Panel's recommendations.

The Joint Review Panel recommendations also touched on a number of socio-economic issues. The Governments of Canada and the Northwest Territories are confident that implementation of the *Mackenzie Gas Project Impacts Act* (MGPIA) along with the Mackenzie Gas Project Socio-Economic Agreement (SEA) will be able to mitigate most, if not all, of the socio-economic impacts

arising from the Mackenzie Gas Project. The MGPIA, which was adopted in 2006 by the Government of Canada, set aside up to \$500 million in contributions to regional organizations with respect to projects that mitigate the existing or anticipated socio-economic impacts on communities in the Northwest Territories arising from the Mackenzie Gas Project. The Government of the Northwest Territories and the Proponents signed the Mackenzie Gas Project SEA in January 2007. The SEA establishes a socio-economic monitoring program, including reporting mechanisms and an NWT Oil and Gas Socio-Economic Advisory Board. The role of the Advisory Board is to ensure that the Project-related effects are monitored and mitigation measures are modified as needed to meet changing elements.

Interpreting the Governments' Response

The Governments of Canada and the Northwest Territories worked together to prepare a response to the Joint Review Panel's Report. The Response represents the collective conclusions of the two Governments and their departments. Under the MVRMA, the Federal Minister, (the Minister of Indian Affairs and Northern Development) and the Responsible Ministers under the Act (Ministers of Environment, Fisheries and Oceans, Transport Canada and the Government of the Northwest Territories) have participated in the preparation of this Response and have provided their concurrence with the final decision to the Federal Minister. Likewise, under the CEAA, Responsible Authorities (Ministers of Environment, Fisheries and Oceans, Transport Canada and Indian Affairs and Northern Development) have indicated their support and approval of the Governments' Response moving forward for final decision under the CEAA. In addition, Natural Resources Canada, Health Canada, Human Resources and Skills Development Canada, Parks Canada, Public Safety Canada and the Royal Canadian Mounted Police and affected Government of the Northwest Territories Departments have been consulted as part of the process to prepare the Response.

The Response represents a unique approach as it is a blend of the MVRMA and the CEAA requirements. In previous less complex environmental assessments solely under the MVRMA, Governments have modified and reworded panel recommendations so they could be accepted. In the current context, as this is the first Environmental Impact Review and joint review under the MVRMA, the Governments' responses are framed in a manner that complies with both Acts, and as such, a statement of response is provided for each recommendation.

The Governments of Canada and the Northwest Territories have worked to develop responses that are mutually agreeable. Nevertheless, it is important to note that where a recommendation was aimed solely at one of the two Governments, the Response may not necessarily represent the views of the other government.

The Governments' Response uses the terminology "accept", "accept the intent" and "do not accept" to respond to recommendations. In instances where the Governments "accept" a recommendation, it means that Governments fully approve the recommendation and agree to implement it as written. Where Governments "accept the intent of a recommendation", the Governments agree with the underlying spirit of the recommendation but cannot implement it as written by the Joint Review Panel but will implement it as set out in the Response. Lastly, where Governments "do not accept" a recommendation, this means that the recommendation is rejected. The response to each

recommendation contains information on why the Governments have determined it necessary to “accept the intent” or “reject” recommendations. Further information on considerations that have resulted in Governments accepting the intent or rejecting recommendations is provided below.

Recommendations that are accepted or accept the intent

The Governments’ Response indicates that Governments propose to “accept” or “accept the intent” of 88 of the 115 recommendations within their respective jurisdictions. The Governments endorse the overall objectives of the recommendations submitted by the Joint Review Panel in their report. Eleven recommendations are accepted exactly as submitted by the Joint Review Panel. For 77 of the recommendations, Governments have accepted the intent, but are unable to accept the recommendation exactly as submitted by the Joint Review Panel. It is important to note that relevant federal departments are committed to implementing these recommendations as per the Governments’ Response, if and when the Project proceeds. The Government of the Northwest Territories is committed to implementing these recommendations as outlined in the Response, to the extent of its authority. There are a number of reasons why Governments were unable to accept recommendations as submitted by the Joint Review Panel:

- Several recommendations have timing implications that would make it difficult for Governments to implement them as currently written. While Governments agree with the intent of these recommendations, they cannot be implemented within the specified timeframe and thus cannot be accepted as written.
- A number of recommendations directed to regulators cannot be accepted as written because they fetter the discretion of future decision-makers. This includes several recommendations regarding approval of the application for the Northwest Alberta Facilities, which has yet to be filed. The Governments consider it inappropriate to accept aspects of a recommendation that fetter the discretion of regulators with respect to future applications. Regulators should be allowed to consider all relevant factors at the time such applications are made. Should applications be filed for future activities, the appropriate regulatory body will evaluate and consider what mitigative measures are necessary having regard, among other things, to the Joint Review Panel Report.
- Several recommendations constrain future development in the North and, therefore, cannot be accepted as written by the Joint Review Panel. For example, in a few instances, the Joint Review Panel recommends that no regulatory agency issue any authorization or approval for a facility that would enable the throughput of the pipeline to be increased above 1.2 billion cubic feet of gas per day until governments fulfil a specific commitment. Governments consider this to be an inappropriate constraint on development over which a proponent has no control. Should there be a requirement to bring new natural gas fields online or expand related infrastructure, Governments are committed to ensuring the appropriate legislative and regulatory requirements are met.

Recommendations that are not accepted

The Governments have not accepted 27 recommendations within their jurisdiction, 20 of which were

determined to be outside the scope of the Joint Review Panel's mandate as per the Joint Review Panel's Agreement and the Environmental Impact Statement Terms of Reference for the Mackenzie Gas Project.¹ Recommendations determined to be out of scope were considered beyond the subject matter or geographic scope of the Mackenzie Gas Project applications that the Joint Review Panel were asked to consider. As a matter of principle, the Governments have taken the position that they will not accept such recommendations. This does not mean that these recommendations are without merit. In many instances where recommendations are out of scope, the Governments have indicated in their Response where they are taking action in other fora to address the underlying issues raised in those recommendations. This is an important message to the Canadian Public that Governments are taking action on these issues but within a broader context than the Mackenzie Gas Project. With respect to the 7 remaining recommendations that were not accepted, the Governments did not agree with the Joint Review Panel recommendation for reasons more specifically set out in the response.

Recommendations Directed to other Parties

In total, 115 recommendations were within the jurisdiction of both Governments, two of those recommendations were directed to both the National Energy Board and the Government of Canada. Of the remaining 61 recommendations, 60 were directed solely to the National Energy Board. The Governments have not taken a position on whether to accept, accept the intent or not accept these recommendations as the National Energy Board has already addressed the content of the recommendations in its Proposed Conditions, dated March 9, 2010. In some cases, the Government of Canada has provided additional advice to the National Energy Board requesting that the Proposed Conditions be modified. Some Joint Review Panel recommendations were inappropriately directed to the National Energy Board and in its Proposed Conditions the National Energy Board redirected them to the appropriate Government regulators. These have been addressed in the Response.

The Governments did not respond to Joint Review Panel recommendation 12-4 which was directed to the Government of Alberta, nor other portions of Joint Review Panel recommendations directed to Alberta, as the Government of Canada and the Government of the Northwest Territories cannot respond on behalf of other governments. For the same reason, the Governments did not respond to portions of recommendations that were directed to the Government of Yukon. The Government of Yukon provided comments on Joint Review Panel recommendations which pertained to its mandate during the intervener comment period. The Governments of Alberta and the Yukon do not have Responsible Ministers under the MVRMA, nor Responsible Authorities under CEAA.

Governments' Response Process

Intervener Comment Period

¹ In making such determinations, reference was made to the mandate of the Joint Review Panel as set forth in Annex 2 of the Joint Review Panel Agreement dated 3 August 2004, and also to the Environmental Impact Statement Terms of Reference for the Mackenzie Gas Project dated August 2004.

Following the release of the Joint Review Panel's report, the Governments and the National Energy Board held an intervenor comment period during which the Proponents and registered interveners in the Joint Review Panel and National Energy Board hearings were provided with an opportunity to comment on the Joint Review Panel's Report. In total, 32 interveners sent comments in writing to the National Energy Board, which posted them on its public registry. The comments were considered by the federal and territorial governments as they prepared the Response.

Consultation with Aboriginal Groups

The Governments have engaged in consultations with affected Aboriginal groups regarding the proposed Mackenzie Gas Project for many years. On May 14, 2010, forty-eight Aboriginal communities and organizations that live in the area of the proposed Mackenzie Gas Project were invited to submit comments in writing and/or to have face-to-face meetings with officials from both Governments with respect to the Governments' Response. The Governments engaged in this process pursuant to subsection 35(1) of the *Constitution Act, 1982*, as a matter of good governance, and the common law duty to consult, which requires the Government of Canada to consult with Aboriginal groups where its decisions may adversely impact potential or established Aboriginal or treaty rights.

During consultations on the Governments' Response, Aboriginal groups raised a variety of s.35-related issues such as wildlife, fish habitat, potential spills (prevention and response) and others. They also raised other issues such as, monitoring, dredging and barge landings, socio-economic issues and the MGPIA. These consultations led to changes in the Response. In some cases the responses to individual recommendations were clarified. In others, consultation with affected Aboriginal groups on the mitigation measures was noted in the Response where appropriate. During consultations the Governments reiterated that affected Aboriginal groups will be consulted further should the Mackenzie Gas Project enter into the regulatory phase (i.e. permitting) and as more detailed construction plans emerge. The Governments will continue to consult affected Aboriginal groups, as appropriate, in order to discharge the Crown's duty to consult.

During Aboriginal consultations, the Governments confirmed that federal regulators would follow through on commitments in the Response and that the National Energy Board would be the enforcement authority for commitments made by the Proponent, to the extent of its authority.

Aboriginal groups also expressed concerns about how the Mackenzie Gas Project would impact their land claim rights and responsibilities as landowners. The Governments take this opportunity to acknowledge and reaffirm their respect for existing Land Claim Agreements, historic Treaties and other agreements that have been concluded with Aboriginal groups in the Northwest Territories and in Northern Alberta who live within the geographic area of the proposed Mackenzie Gas Project. These agreements will be respected. Aboriginal groups with settled land claim agreements are land owners and have decision-making rights on their lands. Comprehensive land claim agreements define a wide range of rights, responsibilities and benefits, including ownership of lands, fisheries and wildlife harvesting rights, participation in land and resource management, financial compensation, resource revenue sharing and economic development projects. Furthermore, the Government of Canada is committed to continue to negotiate with Aboriginal groups in the Northwest Territories who have not completed comprehensive land claim agreements. The

Governments' Response will not prejudice or influence ongoing land claim negotiations, self-government negotiations, agreements and/or protocols.

Consult to Modify

Under the MVRMA, the Responsible Ministers may either agree to adopt the recommendation of a review panel, adopt the recommendation with modifications or reject it. In the latter two situations, the Responsible Ministers must first consult with the review panel. Given that the Governments modified (accept the intent) a number of recommendations and rejected others, they were required by legislation to consult the Joint Review Panel prior to finalizing their Response. As part of the consult to modify process, Governments provided the Panel with new information that had been acquired since the hearings that had been considered in the preparation of the Interim Response, as required under the MVRMA .

Governments received the Joint Review Panel's comments on October 4, 2010. Since then, Governments have carefully considered the Panel's comments and as a result have made revisions which are included in the Final Response. The Governments noted that the Panel stated that it "cannot reaffirm its previous conclusion on the likely significance of the adverse impacts of the Mackenzie Gas Project and the Northwest Alberta Facilities", given that the Governments were unable to accept all the Panel's recommendations. Governments have addressed a number of the Panel's comments to assure Canadians that the appropriate mitigative measures will be in place. Best efforts have been made to clarify misunderstandings regarding finance issues, fettering the decisions of future regulators, recommendations that were outside the scope of the Panel's mandate and constraints to future development. In addition, Governments note that significant efforts have been taken to acquire biophysical baseline information for the monitoring of long-term impacts and to make informed decisions. Therefore, the Governments stand behind their assertion that implementation of the Final Response will eliminate or mitigate any significant adverse effects of the Project.

Conclusion

Under, subsection 37 (2.2) of CEAA a Responsible Authority is required to ensure the implementation of mitigation measures for an approved project. Similarly, under subsection 38 (2) a Responsible Authority is required to design a follow-up program and ensure its implementation.

Furthermore, under the MVRMA subsection 136 (2), the Federal Minister and Responsible Ministers shall carry out a decision by a panel to the extent of their authority. In addition, a first nation, local government, regulatory authority or department or agency of the federal or territorial government affected by a decision shall act in conformity with the decision.

The Governments are committed to implementing the recommendations of the Joint Review Panel in accordance with the Final Response.

**GOVERNMENTS OF CANADA & OF THE NORTHWEST TERRITORIES
FINAL RESPONSE TO THE JOINT REVIEW PANEL REPORT
FOR THE PROPOSED MACKENZIE GAS PROJECT**

Recommendation 5-1

The Panel recommends that the National Energy Board's proposed conditions tabled by the Board in the Mackenzie Gas Project Hearing Order GH-1-2004 proceeding be amended for each of the Proponents to the Mackenzie Gas Project as follows:

1. Unless the National Energy Board (or Chief Conservation Officer) otherwise directs, or except where the Joint Review Panel for the Mackenzie Gas Project (the Panel) has recommended otherwise, [the Proponents] shall cause the approved facilities to be designed, located, constructed, installed and operated in accordance with the specifications, standards, policies, mitigation measures, procedures, and other information referred to in their application or in the Environmental Impact Statement or other filings with the Panel or as otherwise agreed to during the GH-1-2004 Hearing or the review conducted by the Panel.

Response

This recommendation was directed to the National Energy Board.

The National Energy Board has addressed this recommendation within its Proposed Conditions dated 9 March 2010.

Recommendation 5-2

The Panel recommends that the National Energy Board include in any certificate or approvals it might issue in relation to the Northwest Alberta Facilities those conditions the Panel has recommended for inclusion in any certificate or approvals for the Mackenzie Gas Project that could be applied to the Northwest Alberta Facilities, with such modification as the National Energy Board may determine is appropriate having regard to the location, nature and scope of those facilities.

Response

This recommendation was directed to the National Energy Board.

The National Energy Board, within its "Concordance Table for JRP Recommendations and NEB Proposed Conditions", dated 9 March 2010, has indicated that this recommendation is outside the scope of the Mackenzie Gas Project applications as it relates to future application(s).

The Government of Canada notes that this recommendation refers to a future application and acknowledges that the discretion of future regulatory decisions should not be fettered. Should an application for the Northwest Alberta facilities be filed, the appropriate regulatory bodies will evaluate and consider what mitigation measures are appropriate having regard, among other things, to the Environmental Impact Review for the Mackenzie Gas Project.

Recommendation 6-1

The Panel recommends that the National Energy Board, as a condition of any certificate or

approvals it might issue in relation to the Mackenzie Gas Project, require the Proponents to provide prior to the commencement of trenching:

- *an updated inventory and assessment of baseline permafrost, ground-ice and terrain conditions along the Project corridor;*
- *an updated delineation of massive ground ice along the Mackenzie Gathering System and at associated facilities, based on all available data sources and any additional field data collected as part of the Geotechnical Verification Program; and*
- *information on the stratigraphy, locations and extent of ice-rich soils at stream crossings.*

The information filed in accordance with this National Energy Board condition should also be provided to other appropriate regulators for review.

Response

This recommendation was directed to the National Energy Board.

The National Energy Board has addressed this recommendation within its Proposed Conditions dated 9 March 2010.

Recommendation 6-1 reflects information provided to the Joint Review Panel by Natural Resources Canada, Indian and Northern Affairs Canada, and Fisheries and Oceans Canada. The Proposed Conditions require the Proponents to undertake a geotechnical verification program and file borehole logs and geophysical surveys, completed for the Project, with the National Energy Board. The Government of Canada notes that the Proposed Conditions do not explicitly require the Proponents to provide an updated assessment of permafrost, ground ice and terrain conditions along the Mackenzie Gathering System and the pipeline corridor and requests that the Proposed Conditions be modified to include this information as an additional requirement.

Indian and Northern Affairs Canada and Natural Resources Canada will provide available scientific and technical expertise to the National Energy Board and other relevant regulators upon request.

Recommendation 6-2

The Panel recommends that the National Energy Board, as a condition of any certificate or approvals it might issue in relation to the Mackenzie Gas Project, require the Proponents to file, for approval, six months prior to the commencement of trenching:

- *final designs that incorporate updated characterization of ground-ice conditions, including delineation of massive ground-ice occurrence at the gathering system facilities and along the gathering system route, fully utilizing published data as well as any additional field data collected by the Proponents prior to or post-right-of-way clearing;*
- *an update of their ground stability and drainage impact assessments and of their environmental management and mitigation plans based on this additional baseline information on ground-ice conditions, including massive ice;*
- *identification of areas where impacts related to permafrost thaw and frost bulb formation along the right-of-way could be most severe (e.g. settlement, heave, ponding, erosion and drainage alteration) and where pre-burial or early mitigation might be required. This*

assessment should incorporate updated baseline information and thermal modelling. The assessment should examine a range of pipe temperatures along the route over the Project's life, including scenarios of adding compressor stations with various configuration durations, and the potential for associated impacts on right-of-way and pipe integrity, including those sections of the route where a period of freezing (and frost bulb formation) is followed by a reversal to thawing;

- *an effects monitoring plan that includes, in addition to pipeline integrity monitoring, monitoring of permafrost, terrain and geotechnical parameters (such as ground temperatures, thaw bulb size, frost bulb size, ground movements and drainage and erosion changes) relevant to thaw bulb and frost bulb impact assessment;*
- *environmental management and mitigation plans based on the updated baseline information and geohazard assessment; and*
- *a mitigation "tool kit" that includes the thresholds for monitored permafrost, terrain and geotechnical parameters (e.g. ground temperatures, thaw depth and ground movement) that, once reached, will trigger the need for mitigation, as well as the criteria for selecting the most appropriate mitigation technique.*

The information filed in accordance with this National Energy Board condition should be provided to other appropriate regulators and agencies in sufficient time for them to review and provide input to the National Energy Board

Response

This recommendation was directed to the National Energy Board.

The National Energy Board, within its "Concordance Table for JRP Recommendations and NEB Proposed Conditions", dated 9 March 2010, has indicated that the elements of this recommendation are addressed within its Proposed Conditions or through prevailing statutes and regulations.

Recommendation 6-2 reflects information provided to the Joint Review Panel by Natural Resources Canada. The Government of Canada notes that the Proposed Conditions and prevailing statutes and regulations (including the Onshore Pipeline Regulations) do not explicitly require an assessment of the impacts of changing pipe operating temperatures associated with an increase in compressor stations over time, on the right-of-way. The Government requests that the Proposed Conditions be modified to include this information as an additional requirement.

Thaw of existing frost bulbs or formation of new frost bulbs can occur at various locations along the right-of-way as a result of the changes to the ground thermal regime that will accompany the addition of compressor stations. An assessment of the effects of these frost bulb changes as well as any associated mitigation measure requirements needs to be considered before the pipe is buried, since measures to mitigate the effects will likely be limited once the pipeline is in the ground.

Environment Canada, Indian and Northern Affairs Canada and Natural Resources Canada will provide available scientific and technical expertise to the National Energy Board and other relevant regulators upon request.

Recommendation 6-3

The Panel recommends that the National Energy Board, as a condition of any certificate or approvals it might issue in relation to the Mackenzie Gas Project, require the Proponents to file, for approval, prior to the commencement of trenching or well pad and facility construction, final design plans that incorporate further analysis of the impacts of climate change on permafrost and terrain stability over the design life of the Project and post-abandonment. This analysis should be conducted for a series of representative locations, conditions and terrain types and should incorporate climate variability and, in particular, upper limit temperature scenarios to account for the range of future temperature conditions, including their variability and extremes, and the impact of this variability on stream flow regimes. The results should also be incorporated into the monitoring, mitigation and adaptive management plans.

The information filed in accordance with this National Energy Board condition should be provided to other appropriate regulators in sufficient time for them to review and provide input to the National Energy Board.

Response

This recommendation was directed to the National Energy Board.

The National Energy Board has addressed this recommendation within its Proposed Conditions dated 9 March 2010.

Recommendation 6-3 reflects information provided to the Joint Review Panel by Natural Resources Canada, and Environment Canada. The Government of Canada notes that the Proposed Conditions do not explicitly require an analysis of the impacts of climate change and variability on permafrost and terrain stability for a series of representative locations and conditions and requests that the Proposed Conditions be modified to include this information as an additional requirement.

Climate change and climate variability are expected to present significant challenges to people, landscapes and seascapes, and wildlife around the world. The effects of climate change are expected to be most pronounced in high latitude areas such as Canada's Arctic and sub-Arctic (Arctic Climate Impact Assessment, 2004). The structures and infrastructure associated with the Mackenzie Gas Project will be located in the Mackenzie Delta and Valley regions of Canada which, over the past several decades, have already felt the effects from increasing air temperatures. Climate modeling and impact prediction programs consistently demonstrate that additional changes would accelerate and exacerbate these effects. These changes could affect aspects of Project construction in the near term and will likely affect longer term operations and may influence the cumulative effects of the Project on terrestrial and/or aquatic ecosystems. For these reasons, it would be prudent to consider potential climate change/variability in the planning and design of any facility to be built in the Mackenzie Valley and Delta.

Environment Canada, Fisheries and Oceans Canada, Indian and Northern Affairs Canada and Natural Resources Canada will provide available scientific and technical expertise to the

National Energy Board and other relevant regulators upon request.

Recommendation 6-4

The Panel recommends that the National Energy Board, as a condition of any certificate or approvals it might issue in relation to the Mackenzie Gas Project, require the Proponents to file, for approval, six months prior to the commencement of construction, a construction and operations plan for the Project facilities in Kendall Island Bird Sanctuary and for the Fish Island segments of the Mackenzie Gathering System that has been developed in consultation with, and to the satisfaction of, Environment Canada and that includes:

- *the goals of the plan;*
- *the manner in which the Proponents will address the recommendations of Environment Canada with respect to construction and operations of the Kendall Island Bird Sanctuary and the Fish Island segment of the Mackenzie Gathering System;*
- *measures to avoid, prevent or mitigate adverse impacts to migratory birds, their nests, eggs or habitat in Kendall Island Bird Sanctuary and on Fish Island;*
- *plans for monitoring compliance and impacts during construction and operations, as well as proposed responses to address unanticipated impacts; and*
- *reporting frequency and content.*

The plan must also include details on how it will be implemented. When implemented, the Proponents must file copies of their monitoring reports with Environment Canada.

Response

This recommendation was directed to the National Energy Board.

The National Energy Board, within its “Concordance Table for JRP Recommendations and NEB Proposed Conditions”, dated 9 March 2010, has addressed this recommendation and indicated that the construction and operations plans for the Kendall Island Bird Sanctuary (KIBS) and Fish Island should be included within the Proponents’ Environmental Protection Plans and Programs.

The Government of Canada agrees that the construction and operations plan for the Project facilities in the KIBS should be developed in consultation with, and to the satisfaction of, Environment Canada. Environment Canada notes that it does not have authority over Fish Island, but it will provide expert advice to the National Energy Board and other regulators for the portion of the construction and operations plan that covers Fish Island.

Environment Canada will be a regulator for the KIBS portion of this recommendation and will reinforce specifics of the construction and operations plan through migratory bird sanctuary permits for facilities within the KIBS in accordance with Environment Canada’s recommendation to the Joint Review Panel.

Environment Canada, Indian and Northern Affairs Canada and Natural Resources Canada will provide available scientific and technical expertise to the National Energy Board and other relevant regulators upon request.

Recommendation 6-5

The Panel recommends that the National Energy Board, as a condition of any certificate or approvals it might issue in relation to the Mackenzie Gas Project, require the Proponents to file, for approval, six months prior to the commencement of construction, plans that describe, with respect to the entire right-of-way, including watercourse crossings:

- *the methods for determining the quality and quantity of imported fill that may be required to minimize the need for subsequent refilling and regrading;*
- *the timing and methods for hauling and stockpiling those fill requirements;*
- *the methods for monitoring for and remediating ditch subsidence in the first year after construction and as required during operations; and*
- *the methods for disposal of excavated material not required for backfill.*

The information filed in accordance with this National Energy Board condition should be provided to other appropriate regulators and land managers in sufficient time for them to review and provide input to the National Energy Board.

Response

This recommendation was directed to the National Energy Board.

The National Energy Board has addressed this recommendation within its Proposed Conditions dated 9 March 2010.

While the recommendation is directed to the National Energy Board and is addressed in its Proposed Conditions, mitigative measures will also be implemented, as appropriate, through land tenure, and land and water regulatory authorisations for the Project issued by federal departments and regulatory boards in the Northwest Territories.

Environment Canada, Indian and Northern Affairs Canada and Natural Resources Canada will provide available scientific and technical expertise to the National Energy Board and other relevant regulators upon request.

Recommendation 6-6

The Panel recommends that the National Energy Board, as a condition of any certificate or approvals that it might issue in relation to the Mackenzie Gas Project, require the Proponents to file, for approval, six months prior to the commencement of construction, their plans for identifying the potential for and preventing or mitigating any impacts to stream flow or diversion from frost bulb and aufeis creation as a result of the Project. The plans should be developed in consultation with, and to the satisfaction of, Fisheries and Oceans Canada. The plans should include:

- *field procedures to be utilized in determining the potential locations where a frost bulb may impede drainage;*
- *proposed design and construction methods for frost bulb and aufeis prevention and mitigation and the criteria for their selection;*

- *selection of pipe insulation materials and methods of application and installation, including the rationale for same, and the estimated longevity of their effectiveness; and*
- *proposed mitigations for reduced effectiveness of pipe insulation, should it occur, and the criteria for initiating those mitigations.*

The crossing designs and criteria for frost bulb and aufeis mitigation should also address changes in the thermal regime of the pipe associated with the installation of any additional compressor stations required to enable the throughput of the Mackenzie Valley Pipeline to be increased above 1.2 Bcf/d.

Response

This recommendation was directed to the National Energy Board.

The National Energy Board has addressed this recommendation within its Proposed Conditions dated 9 March 2010.

Recommendation 6-6 reflects information provided to the Joint Review Panel by Fisheries and Oceans Canada and Indian and Northern Affairs Canada. The Government of Canada notes that the Proposed Conditions do not explicitly address aufeis or the effects of changes in the thermal regime of the pipe associated with changes in compressor station configurations. The Government of Canada requests that the Proposed Conditions be modified to include this information as additional requirements.

An increase in the number of compressor stations following pipeline installation would cause changes in the thermal regime along the pipeline route, resulting in changes in frost bulb location and size, as well as in aufeis potential at various locations. Measures which mitigate against the effects of frost bulb and aufeis changes could be limited once the pipe is buried and need to be considered when designing and selecting pipe insulation materials and methods of application and installation.

Fisheries and Oceans Canada, Indian and Northern Affairs Canada and Natural Resources Canada will provide available scientific and technical expertise to the National Energy Board and other relevant regulators upon request.

Recommendation 6-7

The Panel recommends that the National Energy Board, as a condition of any certificate or approvals it might issue in relation to the Mackenzie Gas Project, require the Proponents to file, for approval, six months prior to the commencement of construction, detailed descriptions of:

- *installation procedures and limitations of using ditch plugs to mitigate groundwater flow along the pipeline ditch and horizontal directional drilling pathways;*
- *alternative methods for the control of groundwater infiltration and flow along the ditch and horizontal directional drilling pathways and evaluation of the methods' effectiveness in northern conditions; and*
- *how monitoring will be implemented to ensure the effectiveness of these mitigations.*

The information filed in accordance with this National Energy Board condition should be provided to other appropriate regulators in sufficient time for them to review and provide input to the National Energy Board.

Response

This recommendation was directed to the National Energy Board.

The National Energy Board has addressed this recommendation within its Proposed Conditions dated 9 March 2010.

The Government of Canada notes that the Proposed Conditions do not explicitly refer to the ground water flow along the horizontal directional drilling pathways and requests that the Proposed Conditions be modified to include this information as an additional requirement.

Environment Canada, Fisheries and Oceans Canada, Indian and Northern Affairs Canada and Natural Resources Canada will provide available scientific and technical expertise to the National Energy Board and other relevant regulators upon request.

Recommendation 6-8

The Panel recommends that the National Energy Board, as a condition of any certificate or approvals it might issue in relation to the Mackenzie Gas Project, require the Proponents to file, for approval, six months prior to the commencement of construction, detailed mitigation plans to reduce the release of sediments at stream crossings during construction and in the post-construction phase.

The plans filed in accordance with this National Energy Board condition should be provided to other appropriate regulators in sufficient time for them to review and provide input to the National Energy Board.

Response

This recommendation was directed to the National Energy Board.

The National Energy Board has addressed this recommendation within its Proposed Conditions dated 9 March 2010.

The National Energy Board notes within its concordance table that sediment control would be addressed as part of stream crossing designs and incorporated within the Environmental Protection Plans.

The Government notes that mitigative measures will also be implemented, as appropriate, through land tenure and land and water regulatory authorisations for the Project issued by federal departments and regulatory boards in the Northwest Territories.

Environment Canada, Fisheries and Oceans Canada, Indian and Northern Affairs Canada and Natural Resources Canada will provide available scientific and technical expertise to the

National Energy Board and other relevant regulators upon request.

Recommendation 6-9

The Panel recommends that the National Energy Board, as a condition of any certificate or approvals it might issue in relation to the Mackenzie Gas Project, require the Proponents to file, for approval, prior to the commencement of quarrying or trenching:

- *the results of acid rock drainage surveys and/or analyses performed to identify Project activity areas with potential for acid rock drainage;*
- *detailed mitigation and management plans for acid rock drainage prevention or disposal of potentially acid-generating materials, in the event that either expected or unexpected sulphide-rich bedrock is exposed during construction; and*
- *an outline of a monitoring program that would be implemented during operations to assess the effectiveness of mitigation measures.*

The information filed in accordance with this National Energy Board condition should be provided to the other appropriate regulators in sufficient time for them to review and provide input to the National Energy Board.

Response

This recommendation was directed to the National Energy Board.

The National Energy Board has addressed this recommendation within its Proposed Conditions dated 9 March 2010.

The Government of Canada notes that the Proposed Conditions do not explicitly require surveys and monitoring of trenching and borrow pit development for acid rock drainage, and requests that the Proposed Conditions be modified to include this information.

Indian and Northern Affairs Canada and Natural Resources Canada will provide available scientific and technical expertise to the National Energy Board and other relevant regulators upon request.

Recommendation 6-10

The Panel recommends that the National Energy Board, as a condition of any certificate or approvals it might issue in relation to the Mackenzie Gas Project, require the Proponents to file, for approval, prior to the commencement of construction of the facilities at the Taglu or Niglintgak Anchor Fields, a program to monitor subsidence and flooding related to hydrocarbon extraction generated reservoir consolidation for the purpose of verifying predictions of flooding impacts. The monitoring program, developed in collaboration with the appropriate regulators, should include a description of the monitoring techniques that will be used to monitor the ground and water level surfaces and movements, the current accuracy of each monitoring technique, the frequency with which each monitoring technique will be applied, and details on periodic reporting on the monitoring to the appropriate regulators.

Response

This recommendation was directed to the National Energy Board.

The National Energy Board has addressed this recommendation within its Proposed Conditions dated 9 March 2010.

The Government of Canada notes that the Proposed Conditions do not explicitly address the monitoring of flooding and requests that the Proposed Conditions be modified to include this information as an additional requirement.

The monitoring program should be developed to the satisfaction of Environment Canada (as the regulator of the Kendall Island Bird Sanctuary) and Natural Resources Canada (as the technical advisor on the subsidence issue). The requirement for a monitoring program will also be part of the conditions for the Kendall Island Bird Sanctuary permits. In addition to the requirements outlined in this recommendation, regulators may require other components for the monitoring program.

The Government of Canada agrees that the program to monitor subsidence and flooding related to hydrocarbon extraction generated reservoir consolidation for the purpose of verifying predictions of flooding impacts should be developed in consultation with the appropriate authorities. The expectation is that the Proponents will undertake monitoring related to Project impacts and the Government of Canada (through Natural Resources Canada) will undertake regional monitoring. The Government of Canada has started to gather baseline data and assess the requirements needed for an adequate monitoring program related to Project impacts and for the regional monitoring program.

Environment Canada, Indian and Northern Affairs Canada, and Natural Resources Canada will provide available scientific and technical expertise to the National Energy Board and other relevant authorities upon request.

Recommendation 6-11

The Panel recommends that, as part of the follow-up program for the Mackenzie Gas Project, the Government of Canada establish, prior to the commencement of construction, a multi-year permafrost and terrain research and monitoring program for collaborative government–industry monitoring that engages government agencies with relevant scientific expertise in the development of and participation in the follow-up monitoring program. This program should continue into the post-abandonment phase of the Mackenzie Gas Project.

Response

The Government of Canada accepts the intent of this recommendation.

Indian and Northern Affairs Canada, in cooperation with Natural Resources Canada, other government agencies with relevant scientific expertise and the Proponents will establish a collaborative government-industry permafrost and terrain research and monitoring program involving Aboriginal groups and communities as part of the follow-up program for the Mackenzie Gas Project.

The permafrost environment is a key consideration of the proposed pipeline and facilities design for the Mackenzie Gas Project. Understanding current and future permafrost and terrain conditions in the anchor fields, the gathering system and along the pipeline corridor, through both the continuous and discontinuous permafrost zones, is critical for sound environmental management of the Project. The benefits of the long term collaborative government-industry permafrost and terrain research monitoring program along the Norman Wells pipeline corridor were presented by the Government of Canada to the Joint Review Panel. The monitoring program was integral to the assessment of the project-specific impacts of the Norman Wells oil pipeline and to inform decisions regarding its environmental management. The program for the Mackenzie Gas Project will assist regulators and the Proponents in identifying risks associated with ground freezing and thawing along the pipeline corridor and in developing and implementing mitigation measures to minimize impacts.

Recommendation 6-12

The Panel recommends that, in addition to the foregoing Panel recommendations, the National Energy Board adopt its Proposed Conditions 10, 11, 12, 13, 14, 15, 16, 17, 18, 39, 40, 41, 42 and 43 as set out in the Proposed Conditions for the Mackenzie Valley Pipeline and Mackenzie Gathering System, and Proposed Condition 7 as set out for the Proposed Conditions for Shell Canada Limited (Shell) Development Plan for the Niglintgak Field and for Imperial Oil Resources Limited (IORL) Development Plan for the Taglu Field, amended to apply to the relevant proponent and component of the Mackenzie Gas Project and the Northwest Alberta Facilities, as final conditions in any certificate or approvals it might issue in relation to the Project or the Northwest Alberta Facilities.

Response

This recommendation was directed to the National Energy Board.

The National Energy Board, within its “Concordance Table for JRP Recommendations and NEB Proposed Conditions”, dated 9 March 2010, has indicated that those recommendations pertaining to the Mackenzie Gas Project have been addressed in the Proposed Conditions. The National Energy Board notes that the recommendations related to the Northwest Alberta facilities and other future applications are outside the scope of the Mackenzie Gas Project applications and were not addressed in the Proposed Conditions.

The Government of Canada notes that this recommendation refers to a future application and acknowledges that the discretion of future regulatory decisions should not be fettered. Should an application for the Northwest Alberta facilities be filed, the appropriate regulatory bodies will evaluate and consider what mitigation measures are appropriate having regard, among other things, to the Environmental Impact Review for the Mackenzie Gas Project.

Recommendation 7-1

The Panel recommends that, within one year of the date of the Government Response to the Panel's Report, the Government of Canada publish a plan that demonstrates that Transport Canada has adequate capacity in place to ensure that spills and accidents in the Arctic marine environment are appropriately prevented, detected and remediated, and that contraventions of existing legislation will be prosecuted.

Response

The Government of Canada accepts the intent of this recommendation.

Transport Canada does not have the sole authority for ship-source oil spills in the Arctic. Ship-source spills are a shared responsibility between Transport Canada and the Canadian Coast Guard. For this reason, two plans will be used to address this recommendation.

Transport Canada's Environmental Response National Preparedness Plan will identify the legislation and programs that support the prevention and detection of ship-source oil spills, including investigation and enforcement. This plan will be publicly available within one year of the publication of the Governments' Response.

The Canadian Coast Guard's Environmental Response National Response Plan outlines the Government of Canada's response and remediation (including clean-up) capacity and is currently available on the Canadian Coast Guard's website at http://www.ccg-gcc.gc.ca/eng/Ccg/er_National_Response_Plan.

Any spills of petroleum or other hazardous materials in the Northwest Territories should be reported to the Governments' 24-Hour Spill Report line at 1-867-920-8130. The Spill Report Line will inform all relevant federal, territorial and/or Aboriginal groups that a spill has occurred. The Canadian Coast Guard also maintains a 24-hour phone line for all incidents of marine pollution: 1-800-265-0237 (applicable to Central and Arctic regions of Canada).

Recommendation 7-2

The Panel recommends that the National Energy Board, as a condition of any certificate or approvals it might issue in relation to the Mackenzie Gas Project, require the Proponents to file, prior to the commencement of construction and in conjunction with their Environmental Management Plans, the results of their discussions with the Government of the Northwest Territories regarding spill contingency planning and consolidated spills reporting and how the Proponents have addressed the concerns of the Government of the Northwest Territories in these areas.

Response

This recommendation was directed to the National Energy Board.

The National Energy Board has addressed this recommendation within its Proposed Conditions

dated 9 March 2010.

Recommendation 7-3

The Panel recommends that the National Energy Board, as a condition of any certificate or approvals it might issue in relation to the Mackenzie Gas Project, require the Proponents to file, prior to the commencement of construction and as part of their Environmental Management Plans, adequate mitigation measures for spill response for any bulk carriage of diesel or gasoline on roads within the Northwest Territories. At minimum, such mitigation should include the carriage of appropriate spill response kits on all trucks transporting diesel or gasoline and the development of a Spill Contingency Plan to be implemented in the event of a spill. Further, these mitigation measures should receive endorsement from the Government of the Northwest Territories prior to being filed with the National Energy Board.

Response

This recommendation was directed to the National Energy Board.

The National Energy Board, within its “Concordance Table for JRP Recommendations and NEB Proposed Conditions”, dated 9 March 2010, has indicated that this recommendation falls within the jurisdiction of the Government of the Northwest Territories.

The Government of the Northwest Territories accepts the intent of this recommendation.

The Government of the Northwest Territories notes that carriers transporting diesel or gasoline on roads in the Northwest Territories are required to operate in a manner that complies with legislation and conforms to industry standards. The *Transportation of Dangerous Goods Act (NWT)* states that no person shall transport dangerous goods unless they comply with safety requirements, possess applicable shipping documents, and the vehicle and any containers comply with all applicable described safety standards and display all applicable prescribed safety marks.

Under the *Transportation of Dangerous Goods Act (NWT)*, “in the event of a discharge of dangerous goods from a container, packaging or vehicle”, the person who owns or has charge (i.e. the carrier) shall take all other reasonable emergency measures to remedy the discharge. In addition, the *Environmental Protection Act (NWT)* requires reporting of any discharge into the environment. An inspector may order that person to repair or remedy any injury or damage to the environment or the Chief Environmental Protection Officer may require the remedial measures to be carried out.

The Proponents have committed, in the Mackenzie Gas Project Socio-Economic Agreement (MGP SEA), to develop a detailed set of emergency response plans and procedures (MGP SEA section 5.5.1), to collaborate with the Government of the Northwest Territories and local governments to develop and maintain emergency planning and response arrangements (MGP SEA section 5.5.2), and to consider locating emergency response units along road and highway systems in the NWT (MGP SEA section 5.5.3). A logistics planning committee composed of the Proponents, Transport Canada, the Yukon Government, and the Government of the Northwest

Territories is also expected to facilitate interactive planning and resolution of issues. The Royal Canadian Mounted Police is engaged as required.

Recommendation 7-4

The Panel recommends that the National Energy Board, as a condition of any certificate or approvals it might issue in relation to the Mackenzie Gas Project, require the Proponents to file, prior to the commencement of construction and as part of their Environmental Management Plans, the qualifications of the trained personnel monitoring the movement of controlled and hazardous goods and their plan for ensuring compliance with regulations and land use permits.

Response

This recommendation was directed to the National Energy Board.

The National Energy Board, within its “Concordance Table for JRP Recommendations and NEB Proposed Conditions”, dated 9 March 2010, has indicated that this recommendation will be addressed through prevailing statutes and regulations as well as in the Proponents’ Environmental Protection Plan.

Recommendation 7-5

The Panel recommends that the National Energy Board, as a condition of any certificate or approvals it might issue in relation to the Mackenzie Gas Project, prohibit the Proponents from storing Project-related bulk fuel or dangerous goods in or on ice or in or upon water without them prior approval of Transport Canada.

The Panel further recommends that Transport Canada, when considering whether to grant an approval for storage of Project-related bulk fuel or dangerous goods in or on ice or in or upon water, have regard to whether there are logistically or economically practical alternatives to such storage. Where such storage is permitted, the Panel recommends that such storage not be allowed to occur in single-hulled barges and that the following mitigation is in place:

- *appropriate secondary containment;*
- *an appropriate spill response kit; and*
- *a minimum of weekly monitoring for any spills or leaks.*

Response

This recommendation was directed to the National Energy Board.

The National Energy Board, within its “Concordance Table for JRP Recommendations and NEB Proposed Conditions”, dated 9 March 2010, has indicated that this recommendation falls within the jurisdiction of Transport Canada.

The Government of Canada accepts the intent of this recommendation.

The Government of Canada expects the Proponents to adhere to their commitments, made during the Joint Review Panel hearings and their intervener comments filed with the National Energy

Board, to have no premeditated storage of bulk fuel or dangerous goods in ice or in water unless it is in a vessel specifically designed for that purpose. Should there be an unavoidable circumstance, such as during a weather related delay, where some storage of fuel in a single-hulled barge is necessary, the Proponents have committed to working with Transport Canada to ensure that appropriate mitigation measures are in place, including appropriate secondary containment, an appropriate spill response kit and a minimum of weekly monitoring for any spills or leaks.

The operators of barges carrying fuel oil and/or dangerous goods are bound at all times by the *Canada Shipping Act, 2001* which contains a number of provisions dealing with pollution prevention. Operators that are in compliance with the *Canada Shipping Act, 2001* do not require prior approvals from Transport Canada to store bulk fuel or dangerous goods in or on ice or upon water. Transport Canada regulations also do not prohibit the storage of fuel and dangerous goods in existing single-hulled oil barges on the Mackenzie River because these barges are exempt from double hulling requirements.

Transport Canada recognizes that the practice of storing bulk fuel in single-hulled barges is of concern to communities along the Mackenzie River. As such, Transport Canada will be conducting a review of this practice to determine whether existing regulations are adequate, or whether additional measures are required, to protect the environment from ship-source pollution. As part of the review, Transport Canada will be holding outreach sessions with those communities in the Northwest Territories that have expressed a concern with this practice.

Recommendation 7-6

The Panel recommends that the National Energy Board, as a condition of any certificate or approvals it might issue in relation to the Mackenzie Gas Project, require the Proponents, prior to the commencement of construction, to incorporate the following best management practices into management planning for refined petroleum products, hazardous materials and dangerous goods:

- *new bulk fuel storage facilities and any newly placed storage tanks meet the requirements of:*
 - *the most recent version of the National Fire Code of Canada;*
 - *the Environmental Code of Practice for Aboveground and Underground Storage Tank Systems Containing Petroleum and Allied Petroleum Products, Canadian Council of Ministers of the Environment, 2003 (including but not limited to Sections 3, 4, 8 and 9);*
- *equipment used for the purpose of refined petroleum product transfer and storage, including, but not limited to, fittings, valves, couplings and hoses, be designed for the environmental conditions under which it is to be used; and*
- *the Arctic Waters Oil Transfer Guidelines, April 1997, Transport Canada, be used for Arctic and inland waters operations.*

In the absence of federal or territorial regulations for the management of refined petroleum products, hazardous materials or dangerous goods, the Panel recommends that the Proponents adopt a relevant standard or best management practice in consultation with the appropriate

regulatory authority. Where a best management practice requires a more stringent requirement than a regulation or standard, the best management practice must be followed.

Response

This recommendation was directed to the National Energy Board.

The National Energy Board, within its “Concordance Table for JRP Recommendations and NEB Proposed Conditions”, dated 9 March 2010, has indicated that this recommendation falls within the jurisdiction of other regulatory authorities.

The Governments of Canada and the Northwest Territories accept the intent of this recommendation.

The Governments note that the Proponents must comply with the relevant statutes and regulations regarding the management of refined petroleum products, hazardous materials and dangerous goods. For areas within the National Energy Board’s jurisdiction, the Board would require the Proponents to submit plans for the storage and transfer of fuels during construction as part of its Environmental Protection Plans and Emergency Response Plans, as outlined in the Proposed Conditions. For areas outside the National Energy Board’s jurisdiction, Environment Canada would regulate those facilities as per the requirements of the *Storage Tank Systems for Petroleum Products and Allied Petroleum Products Regulations (effective June 12, 2008)* pursuant to the *Canadian Environmental Protection Act*.

Recommendation 7-7

The Panel recommends that the National Energy Board, as a condition of any certificate or approvals it might issue in relation to the Mackenzie Gas Project, require the Proponents to file, prior to the commencement of construction, their Environmental Emergency Plans to the appropriate regulatory authorities for review and approval. These plans should:

- *include:*
 - *an inventory of petroleum products, chemicals and other hazardous substances that will be transported, stored and/or used during pre-construction, construction and operational phases;*
 - *storage facilities and locations of inventoried products;*
 - *identification of resources (equipment and staff) to be on-site and/or available to respond to environmental emergencies;*
 - *procedures for responding to spills and releases, including an incident reporting and notification system;*
 - *a list of response contractors and their respective roles;*
 - *clean-up and disposal procedures for generated wastes;*
 - *identification of sensitive areas such as groundwater sites and sensitive habitat;*
 - *a commitment to design and implement, as appropriate, pre- and post-development monitoring to enable the Proponents to readily identify, respond to and rehabilitate spills and/or chronic contamination should such events occur;*
- *address:*

- *the types of emergencies that might reasonably be expected to occur, including potential on-site and off-site consequences;*
- *prevention (evaluation of risks), preparedness (resources and training), response (notification and mobilization of resources) and recovery (assessment of damages and restoration of environment);*
- *involvement of communities and stakeholders who may be impacted by an environmental emergency or involved in an emergency response; and*
- *be consistent with industry standard publications such as CAN/CSA-Z731-03 Emergency Preparedness and Response and the requirements of all federal and territorial government departments and agencies.*

The Panel further recommends that the effectiveness of these Environmental Emergency Plans be evaluated by the National Energy Board and the appropriate regulatory authorities through exercises conducted each year in which Project-related construction takes place and every three years during operations. Local and territorial emergency authorities should be involved in these exercises as appropriate, and communities should be involved in these exercises to the extent possible considering logistical and safety concerns.

Response

This recommendation was directed to the National Energy Board.

The National Energy Board has addressed this recommendation within its Proposed Conditions dated 9 March 2010.

Recommendation 7-8

The Panel recommends that the National Energy Board, as a condition of any certificate or approvals it might issue in relation to the Mackenzie Gas Project, require the Proponents to provide to the appropriate regulators for review and approval, in advance of the National Energy Board granting the Proponents Leave to Open, the Proponents' accident and malfunction plans that include response activities for earthquakes.

Response

This recommendation was directed to the National Energy Board.

The National Energy Board has addressed this recommendation within its Proposed Conditions dated 9 March 2010.

Recommendation 7-8 reflects information provided to the Joint Review Panel by Natural Resources Canada, which notes that accidents/malfunctions and emergencies caused by earthquakes result in a broader scope of emergency response.

The Government of Canada notes that the Proposed Conditions for the anchor fields require contingency plans that include 'consideration of earthquakes'. Since the Proposed Conditions and prevailing statutes and regulations (including the Onshore Pipeline Regulations) do not explicitly mention earthquakes as part of the requirements for the Proponents Emergency

Preparedness and Response Plan for the Mackenzie Valley Pipeline and Mackenzie Gathering System, the Government of Canada requests that the Proposed Conditions be modified to include this information.

Natural Resources Canada will provide available scientific and technical expertise to the National Energy Board upon request.

Recommendation 7-9

The Panel recommends that the National Energy Board, as a condition of any certificate or approvals it might issue in relation to the Mackenzie Gas Project, require the Proponents to provide to the appropriate regulators for review and approval, prior to the commencement of construction, an Emergency Preparedness and Response Plan for all forms of transportation associated with the Mackenzie Gas Project that includes a continuing education program for the public who might be affected by a transportation-related accident, malfunction or spill associated with the Project. At minimum, the continuing education program should outline how the Proponents and their transportation providers will inform the public of actions to be taken in the event of an emergency and how those potentially affected by an accident or malfunction would be informed of such an event.

Response

This recommendation was directed to the National Energy Board.

The National Energy Board has addressed this recommendation within its Proposed Conditions dated 9 March 2010.

The Government of the Northwest Territories notes that the Proposed Conditions do not specifically address public road systems and the continuing education program for the public who might be affected by transportation-related accidents as this is outside the jurisdiction of the National Energy Board. Several provisions in the Mackenzie Gas Project Socio-Economic Agreement (MGP SEA) address these matters.

The Proponents committed to consult with affected communities and the Government of the Northwest Territories to develop measures to address public safety on highways and roads (MGP SEA section 5.3.7); to develop a detailed set of emergency response plans and emergency procedures dealing with emergencies (MGP SEA section 5.5.1); to collaborate with the Government of the Northwest Territories and local governments to develop and maintain emergency planning and response arrangements (MGP SEA section 5.5.2); and to consider locating emergency response units along road and highways systems where appropriate (MGP SEA section 5.5.3).

Recommendation 7-10

The Panel recommends that the National Energy Board, as a condition of any certificate or approvals it might issue in relation to the Mackenzie Gas Project, require the Proponents to provide, prior to the commencement of construction, as part of the Emergency Preparedness and

Response Plan referred to in Panel Recommendation 7-9, their assessment of the potential for establishment of local, community-based spill response teams, their commitments to build community spill response capacity, and a discussion of opportunities and constraints in establishing local spill response teams.

Response

This recommendation was directed to the National Energy Board.

The National Energy Board has addressed this recommendation within its Proposed Conditions dated 9 March 2010.

Recommendation 7-11

The Panel recommends that, within one year of the date of the Government Response to the Panel's Report, the parties to the Northwest Territories/Nunavut Spills Working Agreement review, update and publish their plans to manage a Project-related accident or spill along the Mackenzie River or in the Mackenzie Delta. The update of these plans should address the specific measures to be taken to notify the public of any spills, the actions to be taken to notify the front-line members of the lead agency that has responsibilities flowing from the agreement, and a method to keep the plans up-to-date. The Panel also recommends that the parties conduct a mock exercise to test these plans. This exercise should be repeated each year that construction is under way and every three years during operations.

Response

The Governments of Canada and the Northwest Territories accept the intent of this recommendation.

The Parties to the *Northwest Territories/Nunavut Spills Working Agreement* agree to review and update the Agreement within one year of the date of the Governments' Response to the Panel's report. Planned meetings will be held twice a year to provide a forum to discuss, review and implement the *Agreement*.

The Parties note that the "mock exercise" in the Joint Review Panel's recommendation refers to a "communications exercise". Upon agreement by all signatories to the Agreement, a communications exercise will be planned prior to construction. The Parties will test their communication plans annually during construction and every three years during operations.

Recommendation 8-1

The Panel recommends that, prior to approval of any facility that would enable the throughput of the Mackenzie Valley Pipeline to be increased above 1.2 Bcf/d, Environment Canada and the Government of the Northwest Territories develop a Regional Air Quality Management Strategy for the Northwest Territories to uphold the "Keeping Clean Areas Clean" principle and provide clear guidance to industry on air quality targets and expectations. The strategy should be developed in collaboration with key stakeholders, including industry. The Panel recommends that the National Energy Board not issue any certificate or approvals for any such facility until

the Regional Air Quality Management Strategy and related targets are in place.

Response

The Governments of Canada and the Northwest Territories accept the intent of this recommendation.

The Governments note that there is a need for a Regional Air Quality Management Strategy and will work collaboratively on its development. The Government of Canada is considering a nationally consistent approach to addressing air pollutants supplemented, as appropriate, by regional air quality management strategies.

The Governments note that this recommendation refers to a future regulatory decision and that the discretion of those regulators should not be fettered. The Joint Review Panel's recommendations will be available for consideration by regulators when applications for future facilities come before them.

The development of the strategy does not need to be linked to any future authorization or approval of a facility, including one that would enable the throughput of the Mackenzie Valley Pipeline to be increased above 1.2 bcf/d. If and when this Project proceeds, the Governments expect that all of its components will be covered within the strategy.

The Government of Canada notes that the second part of the recommendation was directed to the National Energy Board.

The National Energy Board, within its "Concordance Table for JRP Recommendations and NEB Proposed Conditions", dated 9 March 2010, has indicated that this part of the recommendation is outside the scope of the Mackenzie Gas Project applications as it relates to future application(s).

Recommendation 8-2

The Panel recommends that the National Energy Board, as a condition of any certificate or approvals it might issue in relation to the Mackenzie Gas Project, require the Proponents to file, six months prior to the commencement of construction, for review by Environment Canada and the Government of the Northwest Territories, details of their final design as well as construction and operations procedures for upstream facilities, compressor facilities, gathering systems and pipelines that include information on:

- *measures to mitigate methane leakage and venting from all Project-related activities arising from well testing and completion, gas gathering and processing, compressor stations and the mainline piping and valve systems, taking into account existing and new best management practices under development in the natural gas industry;*
- *overall system operation optimization and maintenance scheduling to maximize system reliability and safety, optimize energy efficiency and minimize methane and air contaminant releases;*
- *design choices for the capture and use of exhaust energy at the Inuvik Area Facility; and*

- *design of compressor stations, including unit size, efficiency and conformity with National Emission Guidelines for Stationary Combustion Turbines (Canadian Council of Ministers of the Environment, 1992).*

Response

This recommendation was directed to the National Energy Board.

The National Energy Board has addressed this recommendation within its Proposed Conditions dated 9 March 2010.

Environment Canada and the Government of the Northwest Territories will provide available scientific and technical expertise to the Proponents upon request.

Recommendation 8-3

The Panel recommends that the National Energy Board, as a condition of any certificate or approvals it might issue in relation to the Mackenzie Gas Project, require the Proponents to file, prior to the commencement of construction, a comprehensive Air Quality and Emissions Management Plan that:

- *demonstrates the application of best available technology and best management practices;*
- *provides for identifying, mitigating and tracking emissions of air pollutants and greenhouse gases from all Project-related sources throughout the life of the Mackenzie Gas Project; and*
- *enables the Mackenzie Gas Project's residual air pollutant emissions to meet the Northwest Territories' ambient air quality standards, Canada-Wide Standards for Particulate Matter (PM) and Ozone, National Ambient Air Quality Objectives, and any other applicable thresholds, including any air quality targets developed by Environment Canada and the Government of the Northwest Territories in compliance with Panel Recommendation 8-1.*

The Air Quality and Emissions Management Plan should include, but not be limited to:

- *a description of the best available technology to be implemented at each facility or, if best available technology is not proposed, evidence that a different technology standard will in fact enable the Mackenzie Gas Project to meet comparable goals;*
- *a description of the best management practices to be implemented at each facility and the Proponents' proposed continuous improvement efforts, including plans or strategies to prevent unnecessary vehicle idling and mitigate dust within and outside communities;*
- *an emissions tracking and monitoring system, including emissions reporting that is legally required (e.g. the National Pollutant Release Inventory);*
- *a commitment to reassess environmental impacts, in consultation with Environment Canada and the Government of the Northwest Territories, should significant changes occur to quality and quantity of existing facility emissions sources and new sources to be added to the Mackenzie Gas Project;*
- *an ambient Air Quality Monitoring Program including, but not necessarily limited to, passive nitrogen dioxide monitoring; and*

- *procedures for publicly available annual reporting.*

Response

This recommendation was directed to the National Energy Board.

The National Energy Board has addressed this recommendation within its Proposed Conditions dated 9 March 2010.

Environment Canada and the Government of the Northwest Territories will provide available scientific and technical expertise to the Proponents upon request.

Recommendation 8-4

The Panel recommends that the National Energy Board, as a condition of any certificate or approvals it might issue in relation to the Mackenzie Gas Project, require the Proponents to file, prior to the commencement of construction, an Impacts Monitoring Program that addresses, but is not limited to, the following air quality issues:

- *impacts on northern communities during the construction phase;*
- *impacts of Project-related nitrogen deposition within the Project Review Area on vegetation and wildlife habitat; and*
- *impacts of accidents and malfunctions.*

The Impacts Monitoring Program must be developed in consultation with Environment Canada, the Government of the Northwest Territories, affected communities and Health Canada, and must identify mitigation measures and the means for implementation of those measures.

Response

This recommendation was directed to the National Energy Board.

The National Energy Board has addressed this recommendation within its Proposed Conditions dated 9 March 2010.

Environment Canada, Health Canada and the Government of the Northwest Territories will consult where appropriate upon request in the development of an air quality monitoring program that addresses the intent of this recommendation.

Recommendation 8-5

The Panel recommends that the National Energy Board, as a condition of any certificate or approvals it might issue in relation to the Mackenzie Gas Project, require the Proponents to file, prior to the commencement of construction, as part of their Waste Management Plan, a specific incineration management strategy that has been approved by the Government of the Northwest Territories and Environment Canada. The strategy should include:

- *an analysis of alternatives to incineration and, where incineration has been selected, an analysis of why it was the preferred option;*

- *a description of technology and practices employed at each facility, including the incineration technology selected, the facility Waste Separation Program and the facility waste tracking system, to document the amount and types of waste incinerated;*
- *a commitment to ship to an approved landfill all material that cannot be incinerated properly;*
- *procedures for operational and maintenance record keeping;*
- *details of operator training requirements;*
- *details of emissions measurement methods, where applicable;*
- *an Incineration Residuals-Testing and Reporting Program as well as disposal procedures that are in compliance with criteria specified in the Government of the Northwest Territories' Guideline for Industrial Waste Discharges in the NWT;*
- *procedures for publicly available annual reporting;*
- *a review of the strategy every five years if permanent incineration facilities are proposed; and*
- *where permanent incineration facilities are proposed for the Mackenzie Gas Project, an Environmental Impacts Monitoring Plan to measure incineration-related toxins that is based on the results of further consultation with Environment Canada, the Government of the Northwest Territories and Health Canada.*

Response

This recommendation was directed to the National Energy Board.

The National Energy Board has addressed this recommendation within its Proposed Conditions dated 9 March 2010.

Environment Canada and the Government of the Northwest Territories will work with the Proponents in the development of an incineration management strategy and the waste management plan where appropriate. Upon request, Health Canada will consult where appropriate on the development of an Environmental Impacts Monitoring Plan on permanent incineration facilities as proposed, to address the intent of this recommendation.

Recommendation 8-6

The Panel recommends that, if federal regulations under the Kyoto Protocol Implementation Act are not in place by the time the Proponents make their Decision to Construct the Mackenzie Gas Project, the National Energy Board, as a condition of any certificate or approvals it might issue in relation to the Mackenzie Gas Project, require the Proponents to establish, in collaboration with Environment Canada and the Government of the Northwest Territories, prior to the commencement of construction and in sufficient time to inform the final design, a greenhouse gas emissions target or series of targets based on an effective program involving:

- *a design philosophy based on rigorous conservation and efficiency;*
- *extensive use of best available technology;*
- *use of renewable energy technologies;*
- *best management practices;*
- *training and motivation of personnel; and*

- *a commitment to continuous improvement*

Should the legislation contemplated by Panel Recommendation 8-8 come into effect during the life of the Mackenzie Gas Project, whichever is the lower target should apply to the Project.

Response

This recommendation was directed to the National Energy Board.

The National Energy Board has addressed this recommendation within its Proposed Conditions dated 9 March 2010.

The Governments recommend that the Proponents provide a clear prediction of the anticipated greenhouse gas (GHG) emissions associated with the Mackenzie Gas Project facilities over time including both emission targets and trajectories and the details of any approaches that they propose to adopt to mitigate GHG emissions.

The Governments are prepared to collaborate with the Proponents to establish a GHG emissions target or a series of targets as outlined in the recommendation.

Recommendation 8-7

The Panel recommends that the National Energy Board, as a condition of any certificate or approvals it might issue in relation to the Mackenzie Gas Project, require the Proponents to include greenhouse gas emissions from their facilities in the Mackenzie Gas Project's ongoing monitoring program and to report annually following the commencement of construction, to the National Energy Board, Environment Canada, the Government of the Northwest Territories and the public on the Project's achievements with respect to the greenhouse gas emissions target.

Response

This recommendation was directed to the National Energy Board.

The National Energy Board has addressed this recommendation within its Proposed Conditions dated 9 March 2010.

The Governments support monitoring and reporting of greenhouse gas (GHG) emissions from the Project facilities and expect existing and future federal measures to include requirements for reporting GHG emissions. The Proponents have made a commitment to report GHG emissions from Project facilities.

Recommendation 8-8

The Panel recommends the Government of Canada develop and implement, as soon as possible, legislation and regulations to reduce greenhouse gas emissions in Canada to meet or exceed existing national targets in the Climate Change Plan for Canada.

Response

The Government of Canada notes that this recommendation is outside the scope of the Joint Review Panel's mandate and therefore the Government does not accept this recommendation. The "Agreement for the Environmental Impact Review of the Mackenzie Gas Project", which came into effect on August 3, 2004, sets out the specific and detailed mandate for the Joint Review Panel's environmental impact review. This recommendation goes beyond this mandate because it deals with a national issue (i.e. Canada-wide greenhouse gas emissions reductions) clearly beyond the boundaries of a single-project review.

The Government of Canada understands that the Panel heard concerns from many members of the public on this issue and understands that it may have a linkage to the sustainability framework utilized in the review process. However, the Government of Canada is of the view that it is not an issue that can be dealt with in a project-specific environmental assessment.

The Government of Canada is actively working on reducing greenhouse gas emissions at the national level. It has established a national greenhouse gas emissions (GHG) target of 17% below 2005 levels by 2020, which will be aligned with the final economy-wide emissions target of the United States in enacted legislation. The Government has indicated that it intends to develop federal measures to address GHG emissions, including from the oil and gas sectors.

Recommendation 8-9

The Panel recommends that governments, particularly the Government of Canada, within three years of the date of the Government Response to the Panel's Report, include in their climate change policies and their climate action plans an implementation strategy involving legislation and non-legislative tools that will:

- *optimize the benefits of using natural gas as a transitional fuel in the process of developing a sustainable low-carbon economy; and*
- *ensure that cleaner natural gas is preferentially used to replace and not augment more carbon-intensive and polluting fuels.*

Response

The Government of Canada notes that this recommendation is outside the scope of the Joint Review Panel's mandate and therefore the Government does not accept this recommendation. The "Agreement for the Environmental Impact Review of the Mackenzie Gas Project", which came into effect on August 3, 2004, sets out the specific and detailed mandate for the Joint Review Panel's environmental impact review. This recommendation goes beyond the mandate because it deals with climate change issues that are broader than the Mackenzie Gas Project.

The Government recognizes the value and contribution that natural gas represents in moving towards a low carbon economy. The Government would therefore not preclude the use of natural gas in other situations.

Recommendation 8-10

The Panel recommends that the Canadian Environmental Assessment Agency, the Environmental Impact Review Board for the Inuvialuit Settlement Region, and the Mackenzie Valley

Environmental Impact Review Board, within two years of the date of the Government Response to the Panel's Report, develop a guidance document on the assessment of greenhouse gas emissions in environmental assessments in which sustainability is an overarching objective or principle.

Response

The Government of Canada notes that this recommendation is outside the scope of the Joint Review Panel's mandate and therefore the Government does not accept this recommendation. The "Agreement for the Environmental Impact Review of the Mackenzie Gas Project", which came into effect on August 3, 2004, sets out the specific and detailed mandate for the Joint Review Panel's environmental impact review. This recommendation goes beyond the mandate because it applies to all future environmental assessments for any type of development where sustainability is an overarching objective. The recommendation goes well beyond the Mackenzie Gas Project and any reasonably induced development associated with the Project.

The Canadian Environmental Assessment Agency will review its *Incorporating Climate Change Considerations in Environmental Assessments: General Guidance for Practitioners* (November 2003) to determine how climate change considerations should be included in project assessments under the *Canadian Environmental Assessment Act*. If changes to this guidance document are warranted, they will be developed and published.

The Agency will share the results of this review with the Environmental Impact Review Board of the Inuvialuit Settlement Region, and the Mackenzie Valley Environmental Impact Review Board for their consideration.

Recommendation 9-1

The Panel recommends that the National Energy Board, as a condition of any certificate or approvals it might issue in relation to the Mackenzie Gas Project, require the Proponents to file, six months prior to the commencement of construction, the final suite of decision trees they propose to employ to manage the impacts of the Mackenzie Gas Project on fish and fish habitat, including the decision-making process, the criteria for decision-making and the mitigation options. The decision trees should be developed in consultation with, and to the satisfaction of, Fisheries and Oceans Canada and the relevant management boards and agencies.

In preparing the decision trees, the Proponents should outline how they will address the importance of relevant fish habitat and fish populations to local communities and harvesters, taking into consideration the information provided to them by Fisheries and Oceans Canada and the appropriate management boards and agencies.

Response

This recommendation was directed to the National Energy Board.

The National Energy Board has addressed this recommendation within its Proposed Conditions dated 9 March 2010.

The Government of Canada notes that the Proponents should, within its decision trees, address the importance of fish habitat and fish populations to local communities and harvesters. The

Proponents should address the information provided to them by Fisheries and Oceans Canada, the appropriate management boards and agencies, local communities and harvesters. The Government will assist the Proponents in developing these decision trees by offering the advice of Fisheries and Oceans Canada.

The Government interprets the intent of the second paragraph of this recommendation as less about fish management, and more about directing the Proponents towards consulting with local communities and harvesters. The Government supports this course of action and believes the Proponents should take extra precautions when entering areas identified as important by the communities, through the aforementioned consultations.

Recommendation 9-2

The Panel recommends that Fisheries and Oceans Canada outline its strategic approach to managing the large number of watercourse crossings by the Mackenzie Gas Project and make that approach available to its management partners, the Proponents, stakeholders and the public. This strategic approach should be completed within three months of the date of the Government Response to the Panel's Report. The approach should make clear how Fisheries and Oceans Canada proposes to manage the review of the watercourse crossings and should set out the information it will require the Proponents to file and the time frame for filing same.

Response

The Government of Canada accepts the intent of this recommendation.

Fisheries and Oceans Canada considers that a strategic approach specific to the Mackenzie Gas Project to enable the efficient assessment of the likelihood of Harmful Alteration, Disruption or Destruction (HADD) of fish habitat at watercourse crossings cannot be adequately developed in the recommended time period. Fisheries and Oceans Canada suggests a more appropriate timeline for completing this plan is within three months of a decision to seek authorizations by the Proponents and will work to finalize the strategic approach within such a timeframe.

Recommendation 9-3

The Panel recommends that the National Energy Board, as a condition of any certificate or approvals it might issue in relation to the Mackenzie Gas Project, require the Proponents to file, six months prior to the commencement of construction, the monitoring program for impacts on fish and response actions to be taken for frost bulbs and aufeis, including monitoring at an appropriate level of coverage in space and time. The response actions should address situations where mitigation measures are not working as expected (e.g. reduced effectiveness of pipe insulation), and the Mackenzie Gas Project is posing a risk to fish populations. The monitoring program and response protocols should be reviewed and agreed to by the appropriate regulatory authorities prior to the commencement of construction.

Response

This recommendation was directed to the National Energy Board.

The National Energy Board has addressed this recommendation within its Proposed Conditions dated 9 March 2010.

The Government of Canada notes that the Proposed Conditions do not include Fisheries and Oceans Canada and requests that the Proposed Conditions be modified to include this department.

For clarity, the Government of Canada notes that the use of the word "populations" should be replaced with the word "passage." By monitoring risks to fish passage and applying appropriate mitigation measures if impacts are observed, fish populations will be protected from these impacts.

The Government of Canada further notes that the Proposed Conditions do not explicitly address successive changes in compressor station configuration and resulting changes in thermal regimes and their environmental effects, and requests that the Proposed Conditions be modified to include this information.

Recommendation 9-4

The Panel recommends that the National Energy Board, as a condition of any certificate or approvals it might issue in relation to the Mackenzie Gas Project, require the Proponents to file, no later than six months prior to the commencement of construction, a fish habitat compensation plan. The fish habitat compensation plan should be developed in consultation with, and to the satisfaction of, Fisheries and Oceans Canada. The plan should provide the basis for implementing effective habitat compensation measures such that the users of the local fisheries resource benefit from the habitat compensation measures over the long term. The plan should include:

- *the decision-making process to be used for achieving No Net Loss in accordance with Fisheries and Oceans Canada's National Habitat Management Policy, including how public and Aboriginal input will be incorporated;*
- *locations of potential Project-related HADD sites and the method for quantifying HADD fish habitat associated with the Mackenzie Gas Project;*
- *plans for fish habitat compensation measures to address HADD and the achievement of No Net Loss and the locations in which the plans are to be implemented;*
- *the process the Proponents will follow, and the criteria they will consider, in the selection of compensation measures that would be implemented when the location of the mitigation is not at the site where the impacts are occurring; and plans to be used to verify and measure the success of the fish habitat compensation techniques.*

Response

This recommendation was directed to the National Energy Board.

The National Energy Board, within its "Concordance Table for JRP Recommendations and NEB Proposed Conditions", dated 9 March 2010, has indicated that this recommendation is under the jurisdiction of Fisheries and Oceans Canada.

The Government of Canada accepts the intent of this recommendation.

Fisheries and Oceans Canada will require a relevant and satisfactory fish habitat compensation plan to be submitted by the Proponents no later than six months prior to the start of the works or undertakings causing the Harmful Alteration, Disruption or Destruction of fish habitat with respect to any authorization issued under the *Fisheries Act* in relation to the Mackenzie Gas Project. Fisheries and Oceans Canada notes that the timely development of fish habitat compensation plans is essential to ensuring the No Net Loss objectives and guiding principles are met as per the Fisheries and Oceans Canada Habitat Policy. As well, other regulatory approvals may be required prior to the implementation of compensation plans.

Recommendation 9-5

The Panel recommends that, prior to issuing any authorizations under the Fisheries Act for activities related to the Mackenzie Gas Project, Fisheries and Oceans Canada develop a strategy for ensuring that effective habitat compensation measures are implemented by the Proponents, such that the users of the local fisheries resource benefit from the habitat compensation measures to the greatest extent possible over the long term and that Fisheries and Oceans Canada reflects the principles of this strategy in any authorizations it issues under the Fisheries Act for activities related to the Mackenzie Gas Project.

Response

The Government of Canada accepts the intent of this recommendation.

Fisheries and Oceans Canada notes that the development of compensation options will be guided by the ‘Policy for the Management of Fish Habitat’ and accompanying departmental guidance. This includes consultation with affected Aboriginal groups on all *Fisheries Act* authorizations pertaining to the Mackenzie Gas Project. Fisheries and Oceans Canada expects that any habitat compensation measures required as a result of the Mackenzie Gas Project will occur as close as possible to the originally disturbed habitat as directed in the Habitat Policy, thereby benefiting local fishers.

Recommendation 9-6

The Panel recommends that Fisheries and Oceans Canada, Environment Canada, Indian and Northern Affairs Canada, Transport Canada, the National Energy Board and any other department or agency with responsibility for inspection and enforcement in relation to fish or fish habitat or the aquatic and marine environments re-visit existing arrangements and develop a strategy that will provide for effective inspection and enforcement in relation to protecting fish, fish habitat, and the aquatic and marine environments in the north and in relation to Project-related activities. This strategy should also identify the resources necessary for its implementation, including identification of staff needed in the field to carry out the inspection and enforcement. The enforcement and inspection strategy should be completed prior to the commencement of construction and filed with the National Energy Board, as the lead regulatory agency for the Mackenzie Gas Project.

Response

The Government of Canada accepts the intent of this recommendation.

The Government of Canada notes that completion of the inspection and enforcement strategy need not be a pre-condition of Project approval. Responsible departments and agencies will continue to work together, as appropriate, to develop a coordinated enforcement and inspection strategy in relation to Project-related activities.

This recommendation is directed towards ensuring a unified and informed approach to compliance monitoring of the Proponents' activities by the regulatory authorities referred to in the recommendation and in relation to fish or fish habitat or the aquatic and marine environments. Fisheries and Oceans Canada will continue to work with environmental monitoring agencies, in addition to other regulatory agencies, in the development of inspection strategies. Enforcement issues will remain the sole jurisdiction of authorities with a legal mandate for enforcement.

The Government of Canada is confident that the strategy being developed in collaboration with the applicable regulatory agencies will meet the needs of the Project.

Recommendation 9-7

The Panel recommends that the National Energy Board, as a condition of any certificate or approvals it might issue in relation to the Mackenzie Gas Project, require the Proponents to file, at least six months prior to the commencement of construction, their final plans for Project-related dredging and installing barge landings. The plans should be developed in consultation with potentially affected communities and identify the concerns expressed by those communities and how those concerns have been addressed in the development of the plans. The plans should also be developed in consultation with, and to the satisfaction of, Fisheries and Oceans Canada and Transport Canada, and indicate how dredging activities will be undertaken so as to avoid conflict with community fisheries and provide for monitoring.

Response

This recommendation was directed to the National Energy Board.

The National Energy Board, within its “Concordance Table for JRP Recommendations and NEB Proposed Conditions”, dated 9 March 2010, has indicated that dredging and barge landing plans fall within the jurisdiction of other regulatory authorities for the Mackenzie Gas Pipeline portion of the Project. The National Energy Board has addressed this recommendation for the Taglu portion of the Project within its Proposed Conditions dated 9 March 2010.

The Government of Canada accepts the intent of this recommendation.

Environment Canada, Fisheries and Oceans Canada, Indian and Northern Affairs Canada and Transport Canada will require the Proponents to provide final plans for dredging and barge landing installations for the Mackenzie Gas Pipeline portion of the Project at least six months prior to commencement of construction activities for Project-related dredging and barge landing

installations. The filing of the plans must take into account that site visits may be required, which can only be completed in open water season. Plans must be developed in consultation with potentially affected communities and to the satisfaction of these federal departments.

The Government of Canada notes that the National Energy Board does not explicitly require that the Proponents consult with Environment Canada, Fisheries and Oceans Canada, Indian and Northern Affairs Canada and Transport Canada in the development of plans for dredging and installing the barge landing located at the Taglu Field. The Government of Canada requests that the Proposed Conditions be modified to require the Proponents to consult with Environment Canada, Fisheries and Oceans Canada, Indian and Northern Affairs Canada and Transport Canada in their development of plans for dredging and installing the barge landings located at the Taglu Field.

Recommendation 9-8

The Panel recommends that the National Energy Board, as a condition of any certificate or approvals it might issue in relation to the Mackenzie Gas Project, require the Proponents to file, at least six months prior to the commencement of dredging, their final plans for dredging in support of transport of the Very Large Modules and the Gas Conditioning Facility. The plans should be developed in consultation with, and to the satisfaction of, Fisheries and Oceans Canada, Environment Canada and Transport Canada. The plans should be developed in consultation with the Fisheries Joint Management Committee and the Inuvialuit Game Council as well as the potentially affected communities, and identify the concerns expressed by those bodies and how those concerns have been addressed in the development of the plans. The plans should include the specific measures proposed to address any adverse impacts and provide for monitoring.

Response

This recommendation was directed to the National Energy Board.

The National Energy Board, within its “Concordance Table for JRP Recommendations and NEB Proposed Conditions”, dated 9 March 2010, has indicated that dredging and barge landing plans fall within the jurisdiction of other regulatory authorities.

The Government of Canada accepts the intent of this recommendation.

Environment Canada, Fisheries and Oceans Canada and Transport Canada as regulatory authorities will require the Proponents to provide plans for all Project-related dredging and barge landings at least six months prior to commencement of construction activities for Project-related dredging and installation of barge landings. Filing of plans must take into account that site visits may be required which can only be completed in open water season.

These final plans must be developed in consultation with Environment Canada, Fisheries and Oceans Canada, Indian and Northern Affairs Canada and Transport Canada as well as the Inuvialuit Game Council, the Fisheries Joint Management Committee, potentially affected Aboriginal groups and potentially affected communities and must be to the satisfaction of these

federal departments.

Recommendation 9-9

The Panel recommends that the National Energy Board, as a condition of any certificate or approvals it might issue in relation to the Mackenzie Gas Project, require Shell Canada Limited to file, either as an individual applicant or as a part of a filing in support of Panel Recommendation 9-8, at least six months prior to the commencement of construction, its plan for excavation/dredging at the site of the Gas Conditioning Facility at Niglintgak. Shell Canada Limited's plan should describe the potential impacts associated with dredging and the site-specific mitigation measures proposed to address those adverse impacts. The plan should be developed in consultation with the Fisheries Joint Management Committee and the Inuvialuit Game Council and indicate how the concerns of these bodies have been addressed in the plan. The plan should be developed in consultation with, and to the satisfaction of, Fisheries and Oceans Canada.

Response

This recommendation was directed to the National Energy Board.

The National Energy Board has addressed this recommendation within its Proposed Conditions dated 9 March 2010.

The Government of Canada notes that the National Energy Board does not explicitly require that the Proponents consult with Environment Canada, Fisheries and Oceans Canada and Transport Canada in the development of plans for excavation and dredging at the site of the barge-based gas conditioning facility set-down location. The Government of Canada requests that the Proposed Conditions be modified to require the Proponents to consult with Environment Canada, Fisheries and Oceans Canada and Transport Canada in their development of plans for excavation and dredging at the site of the barge-based gas conditioning facility set-down location.

The filing of the final plans must take into account that site visits may be required, which can only be completed in open water season. Therefore, Fisheries and Oceans Canada, Environment Canada and Transport Canada may require more than six months to review the Proponents final plans for Project-related dredging and barge landing sites.

Recommendation 9-10

The Panel recommends that the National Energy Board, as a condition of any certificate or approvals it might issue in relation to the Mackenzie Gas Project, require the Proponents to file, at least six months prior to any Project-related barging or marine transportation activity in the Beaufort Sea or Kugmallit Bay, a Marine Mammal Protection Plan that has been developed in consultation with, and endorsed by, Fisheries and Oceans Canada, other appropriate regulatory agencies, management boards and affected communities and that:

- *prescribes the measures the Proponents will implement to protect marine mammals from adverse impacts and the monitoring and adaptive management activities to be undertaken;*

- *reflects the compilation and consideration of all available data on the beluga harvest in order to refine Mackenzie Gas Project activity timing to avoid disturbing marine mammals and marine mammal harvesting;*
- *includes development of maps that overlay both Project-related noise distribution and marine mammal distribution;*
- *includes provision for on-board vessel experienced marine mammal observers during shipping activities and dredging. Marine mammal observers should be hired locally and the protocol for observations should be submitted to Fisheries and Oceans Canada and the management organizations for review and approval prior to filing with the National Energy Board;*
- *includes the use of aerial surveys flown before ship transit and dredging in order to schedule or plan activities to avoid impacts to marine mammals;*
- *identifies the zone of influence within which activity must be shut down or the route altered when marine mammals are observed;*
- *consistent with Panel Recommendations 9-8 and 9-9 describes dredging plans, including how dredging in relation to the transport of the Gas Conditioning Facility will be completed in one season. Dredging plans must include provision for consulting Hunters and Trappers Committees in Tuktoyaktuk, Inuvik and Aklavik and the Fisheries Joint Management Committee, and must avoid interference with the beluga harvest. Dredging should also be completed in one summer season — a one-time event occurring over less than two months in localized areas, if at all possible;*
- *includes protocols for observing, reporting and responding to monitoring results before dredging and transportation of the Gas Conditioning Facility;*
- *establishes a clear means of consultation and communication between hunters/communities and operators to ensure that dredging and Mackenzie Gas Project-related marine traffic does not occur in the areas to be traversed or dredged until after the communities of Tuktoyaktuk, Inuvik and Aklavik have completed their beluga whale hunt and that advance notification is provided to the Hunters and Trappers Committees in Tuktoyaktuk, Inuvik and Aklavik of when the barges will be transported through their areas in order to avoid negative interactions with marine mammal harvesting activities; and*
- *describes how the plan will be updated with the acquisition of annual monitoring data.*

The plan should also be filed with the local communities, appropriate regulatory authorities and management organizations.

Response

This recommendation was directed to the National Energy Board.

The National Energy Board, within its “Concordance Table for JRP Recommendations and NEB Proposed Conditions”, dated 9 March 2010, has indicated that this recommendation is under the jurisdiction of other regulatory authorities.

The Government of Canada accepts the intent of this recommendation.

The Government of Canada notes that the Marine Mammal Protection Plan should make use of

existing aerial survey data and other available data to identify key routes and habitats. The need for aerial surveillance would be limited to certain shipping scenarios. Where information on transit routes is detailed, it will not be necessary to fly extensive regional surveys for a small number of transits (i.e. less than 10 in total). New aerial surveys should be undertaken when there is insufficient data and where larger transits are anticipated.

The Proponents have previously committed to all of the measures included in this recommendation.

Recommendation 9-11

The Panel recommends that Fisheries and Oceans Canada and Environment Canada require, as a condition of any authorization granted under the Fisheries Act or the Canadian Environmental Protection Act, 1999 for Project-related activities in relation to dredging or dredged spoil disposal in the vicinity of the Kittigazuit S-bends, that dredging and disposal of dredge spoils not commence until the date mutually agreed to by the Inuvialuit Game Council, Fisheries Joint Management Committee and local hunters. Fisheries and Oceans Canada and Environment Canada should communicate with the Proponents and with hunters for the purpose of incorporating appropriate measures in their regulatory approvals with a view to enabling dredging to begin as early as possible without adversely affecting the beluga whale hunt and to completing the dredging in one season.

Response

The Government of Canada accepts the intent of this recommendation.

For clarity, the Government of Canada notes that ‘local hunters’ in this recommendation refers to the Tuktoyaktuk, Inuvik and Aklavik Hunters and Trappers Committees and other harvesters as appropriate. The listed parties must provide a mutually acceptable start date to Environment Canada and Fisheries and Oceans Canada in sufficient time to be incorporated into their regulatory instruments.

Recommendation 9-12

The Panel recommends that Fisheries and Oceans Canada, at least six months prior to any Project-related barging or marine transportation activity in the Beaufort Sea or Kugmallit Bay review its position with respect to aerial surveillance and monitoring in support of Mackenzie Gas Project vessel transits in the Beaufort Sea and develop a policy broadly applicable to shipping in the Beaufort Sea and potential increases in marine transportation activity in the future. The policy and program initiatives to manage and monitor vessel transit activities should include the requirement for overflights and observers on a basis that is fair and equitable to all operators and reflects the degree of risk to bowhead and beluga whale individuals and populations associated with particular types of operations.

Response

The Government of Canada accepts the intent of this recommendation.

Fisheries and Oceans Canada will review its position with respect to aerial surveillance and monitoring in support of Mackenzie Gas Project vessel transits.

While Fisheries and Oceans Canada does not have the mandate to develop a policy broadly applicable to managing and monitoring vessel traffic in the Beaufort Sea, the Government of Canada recognizes the importance of managing vessel activities in order to minimize their impacts on beluga and bowhead individuals and populations. An Integrated Oceans Management Plan (IOMP) has been developed collaboratively by the federal and territorial Governments, Aboriginal groups, co-management boards, industry, academia, and non-governmental organizations for the Beaufort Sea Large Ocean Management Area (LOMA). Objectives within the plan include spatial planning in the LOMA and managing large-scale marine traffic.

Recommendation 9-13

The Panel recommends that Fisheries and Oceans Canada work with its management partners and other international jurisdictions to increase its knowledge base regarding beluga and bowhead whale population levels, movements, feeding areas, behaviour and energetics in the Beaufort Sea and throughout their ranges, and to identify potential cumulative stressors on the populations, to build an understanding of the role and degree of impact that the Mackenzie Gas Project and future development in the Beaufort Sea may have at the individual and population levels.

Response

The Government of Canada accepts the intent of this recommendation.

Fisheries and Oceans will continue to work with its management partners and other international jurisdictions to increase its knowledge base of beluga and bowhead whales in the southern Beaufort Sea. This is where marine activity associated with the Mackenzie Gas Project including vessel and barge transport as well as infrastructure associated with future development is likely to occur. Fisheries and Oceans Canada is already conducting research into the behaviour and life history of beluga and bowhead whales and the effects of industry on the whales. Studies are expected to continue in this region and, where appropriate, Fisheries and Oceans Canada's policies and actions in the southern Beaufort Sea will be informed by these studies.

The Government of Canada notes that recent funding was announced for the Beaufort Sea Regional Environmental Assessment (BREA). BREA is a multi-stakeholder initiative to sponsor regional environmental and socio-economic research that will inform potential offshore oil and gas activities in the Beaufort Sea.

Recommendation 9-14

The Panel recommends that, prior to the commencement of shipping activities in support of the Project that will transit the Beaufort Sea in Canada, Transport Canada prepare and publish its policy on how the Ballast Water Control and Management Regulations will be implemented and

that Transport Canada demonstrate that it has an effective system for ensuring compliance with the regulations for Project-related shipping activities, including how and where inspectors will be deployed in order to prevent the introduction of non-indigenous invasive aquatic species.

Response

The Government of Canada accepts the intent of this recommendation.

Transport Canada recognizes the importance of applying appropriate ballast water management practices to avoid and/or minimize the introduction of invasive species from foreign vessels entering waters under Canadian jurisdiction.

Canada ratified the International Convention for the Control and Management of Ships' Ballast Water and Sediments in April 2010. In so doing, Canada has accepted the conditions of the Convention that state that all new vessels after 2012 and all existing vessels after 2016 will be required to have approved ballast water treatment systems on board. Canada's *Ballast Water Control and Management Regulations* will be amended to reflect these newer requirements.

The *Ballast Water Control and Management Regulations* came into force in 2006 and apply to all Canadian waters, including the Beaufort Sea and the Mackenzie River. All foreign vessels entering Canadian waters must comply with these regulations as outlined in Transport Canada's *Guide to Canada's Ballast Water Control and Management Regulations* (TP 13617), which has been made publically available and will be fully implemented in the Project area. This document also includes Transport Canada's compliance and enforcement procedures for implementing the regulations.

Transport Canada will use this Guide as a basis to develop measures, including an inspection schedule that is tailored to Mackenzie Gas Project requirements.

Recommendation 9-15

The Panel recommends that the Government of Canada determine the feasibility of establishing a ballast water exchange zone for vessels prior to entry into the Beaufort Sea. Provided such a zone is feasible, Transport Canada should create the zone within three years of the date of the Government Response to the Panel's Report.

Response

The Government of Canada notes that this recommendation is outside the scope of the Joint Review Panel's mandate and therefore the Government does not accept this recommendation. The "Agreement for the Environmental Impact Review of the Mackenzie Gas Project", which came into effect on August 3, 2004, sets out the specific and detailed mandate for the Joint Review Panel's environmental impact review. This recommendation goes beyond the mandate as it includes all vessel traffic in the Beaufort Sea, not that which would be specific to the Mackenzie Gas Project.

Transport Canada recognizes the importance of applying appropriate ballast water management practices to avoid and/or minimize the introduction of invasive species from foreign vessels

entering waters under Canadian jurisdiction. The *Ballast Water Control and Management Regulations* require foreign vessels to manage their ballast water prior to entering Canada's Exclusive Economic Zone (EEZ). The area which the Panel has recommended for a ballast water exchange zone lies outside of Canada's EEZ and therefore Canada does not have the jurisdiction to establish an Alternate Ballast Water Exchange zone there.

Transport Canada notes that the feasibility of establishing an Alternate Ballast Water Exchange Zone in the Canadian Beaufort Sea was reviewed with the scientific community, other federal authorities, industry and environmental groups. It was determined that such a zone would not be viable.

Transport Canada continues to consult with international and national authorities and is presently working with the scientific community and industry to evaluate the effectiveness of the *Ballast Water Control and Management Regulations* for all Canadian waters including the Beaufort Sea and the Mackenzie River and will amend the regulations as appropriate.

In April 2010, Canada ratified the International Convention for the Control and Management of Ships' Ballast Water and Sediments. By ratifying the Convention, Canada has accepted the conditions of the Convention that state that all new vessels after 2012 and all existing vessels after 2016 will be required to have approved ballast water treatment systems on board. Canada's Ballast Water Control and Management Regulations will be amended to reflect these newer requirements.

Recommendation 9-16

The Panel recommends that Transport Canada evaluate the effectiveness of the Ballast Control and Management Regulations as applied to the Mackenzie Gas Project, with a particular emphasis on the scientific basis for the regulations. The evaluation should be completed and, if any amendments to the Ballast Control and Management Regulations are required as a result of the evaluation, necessary regulatory reform should be implemented within three years of the date of the Government Response to the Panel's Report.

Response

The Government of Canada accepts the intent of this recommendation.

Transport Canada recognizes the importance of having an effective ballast water management system to avoid and/or minimize the introduction of invasive species from foreign vessels entering waters under Canadian jurisdiction.

Canada has ratified the International Convention for the Control and Management of Ships' Ballast Water and Sediments in April 2010. In so doing, Canada has accepted the conditions of the Convention that state that all new vessels after 2012 and all existing vessels after 2016 will be required to have approved ballast water treatment systems on board. Canada's *Ballast Water Control and Management Regulations* are being amended to reflect these newer requirements.

Transport Canada continues to consult with international and national authorities and is presently

working with the scientific community and industry to evaluate the effectiveness of the *Ballast Water Control and Management Regulations* for all Canadian waters including the Beaufort Sea and the Mackenzie River and will amend the regulations as appropriate.

Recommendation 9-17

The Panel recommends that, within two years of the date of the Government Response to the Panel's Report, Fisheries and Oceans Canada and its management partners review current harvest management programs and take the necessary steps to put in place the policies and programs to manage any increased harvest pressures and to enhance their public education and enforcement programs. Fisheries and Oceans Canada and its management partners should make public the actions they are taking to address increased harvest pressures.

Response

The Government of Canada accepts the intent of this recommendation.

The Government of Canada recognizes that the Mackenzie Gas Project and related induced development may result in increased harvest pressures to fisheries. To this end, Fisheries and Oceans Canada has developed a Fisheries Impact Management Framework. This Framework provides tools and techniques that will assist Fisheries and Oceans Canada and its management partners in developing strategies to address harvest pressures that may result from increased access. As the Framework moves forward, Fisheries and Oceans Canada will conduct consultations with Aboriginal groups. Public education and enforcement are two strategies currently used by the department to help reduce harvesting pressures and the Fisheries Impact Management Framework will inform the enhancement of these strategies.

Recommendation 10-1

The Panel recommends that the National Energy Board, as a condition of any certificate or approvals it might issue in relation to the Mackenzie Gas Project or to the Northwest Alberta Facilities, require the Proponents and NOVA Gas Transmission Ltd., respectively, to file a Wildlife Protection and Management Plan specific to each of the following species as appropriate — woodland caribou, barren ground caribou, grizzly bear, polar bear and wolverine — and a General Wildlife Protection and Management Plan applicable to all other species of wildlife. These Wildlife Protection and Management Plans must be filed six months prior to the commencement of construction. These Wildlife Protection and Management Plans must be developed in consultation with, and to the satisfaction of, the governments of the Northwest Territories and Alberta wildlife management boards and others as appropriate. The plans should reflect the geographic region and site-specific details of the facilities to which they will be applied and address issues related to fragmentation.

The plans must include:

- *goals of the plan;*
- *area covered by the plan, including at a minimum all areas within a specified radius of any Project-related facility or construction activity;*

- *assumed zones of influence of Project activities, by activity and by species, and rationales for these assumptions;*
- *timing and dates during which Project-related activities would occur so as to avoid or minimize conflict with caribou movement or sensitive feeding or calving times;*
- *mitigation measures, including but not limited to those needed to minimize width of linear disturbances, maximize vegetation recovery, adjust timing of activities, limit harvesting, limit predator travel corridors, implement employee/contractor access management, ensure effective reporting, eliminate barriers to movements, and ensure effective communications and reporting;*
- *monitoring components applicable to all phases of the Project, including but not limited to documenting vegetation recovery; documenting and reporting wildlife incidents, interactions and mortality; evaluating the effectiveness of access management; and establishing and maintaining linkages to regional programs;*
- *any surveys and protocols to be employed to avoid or prevent impacts to wildlife, including the proposed timing of any den survey activities and how the Proponents will identify current year and active dens;*
- *identification of mitigation plans to avoid potential maternal denning areas;*
- *protocols for managing potential interactions between wildlife and humans, including measures to deter wildlife and, in particular, bears from entering camps and other facilities;*
- *any wildlife protection measures included in the Proponents' spill contingency plans;*
- *methods for tracking and reporting human-wildlife interactions and any wildlife mortality that may occur as a result of the implementation of measures contained in the spill contingency plans;*
- *education and awareness activities aimed at reducing the potential for human-wildlife conflicts at the Proponents' facilities;*
- *plans for monitoring responses of wildlife to Project activities during all phases of the Project;*
- *provisions for public consultation on access management;*
- *the process for updating the protection plan as information gaps are addressed; and processes for oversight and reporting and a description of how those processes will be implemented.*

Each Wildlife Protection and Management Plan must also include details on how it will be implemented by each operator of a facility of the Mackenzie Gas Project or the Northwest Alberta Facilities, and, based on the advice of wildlife management boards, the measures each operator will take to enable the participation of local monitors. The Proponents and NOVA Gas Transmission Ltd. must file copies of the reports required by the monitoring provisions of the plans with the Government of the Northwest Territories, the Government of Alberta and the relevant wildlife management boards, as appropriate.

Response

This recommendation was directed to the National Energy Board and the Province of Alberta.

The National Energy Board, within its “Concordance Table for JRP Recommendations and NEB Proposed Conditions” dated 9 March 2010, has indicated that this recommendation has been addressed within its Proposed Conditions with the exception of those portions that relate to future applications.

The Government of Canada will not respond to the portions of this recommendation that are under the jurisdiction of the Province of Alberta.

The Government of Canada notes that this recommendation refers to a future application and acknowledges that the discretion of future regulatory decisions should not be fettered. Should an application for the Northwest Alberta facilities be filed, the appropriate regulatory bodies will evaluate and consider what mitigation measures are appropriate having regard, among other things, to the Environmental Impact Review for the Mackenzie Gas Project.

The Governments of Canada and the Northwest Territories note that the Proponents have committed to consult with Aboriginal communities on wildlife management plans. The Governments expect that the Proponents will actively involve Aboriginal communities in the development and implementation of wildlife protection and management plans. The Governments will work with the Proponents and appropriate wildlife management boards in the development of Wildlife Protection and Management Plans. The Proposed Conditions specify requirements for the Proponents to protect wildlife.

Recommendation 10-2

The Panel recommends that the National Energy Board, as a condition of any certificate or approvals it might issue in relation to the Mackenzie Gas Project, require the Proponents to conduct a survey in those parts of the Local Study Area where, based on the most recent assessment by the Committee on the Status of Endangered Wildlife in Canada, the yellow rail and western toad might occur, to confirm the presence or absence of those species. The survey must be designed to the satisfaction of Environment Canada and conducted prior to the commencement of construction. Where the presence of the yellow rail or western toad is confirmed as a result of the survey, the National Energy Board condition should require the Proponents to notify Environment Canada of the presence of the species, identify their proposed measures to avoid and lessen the impact of the Mackenzie Gas Project on the species, and identify their proposed monitoring measures.

Response

This recommendation was directed to the National Energy Board.

The National Energy Board has addressed this recommendation within its Proposed Conditions dated 9 March 2010.

Recommendation 10-3

The Panel recommends that Environment Canada complete recovery strategies and action plans as required by the Species at Risk Act, including the determination of critical habitat, for each

of the woodland caribou, wood bison and peregrine falcon within one year of the date of the Government Response to the Panel's Report.

Response

The Government of Canada accepts the intent of this recommendation.

The recovery strategies and action plans required by the *Species at Risk Act* (SARA), including the determination of critical habitat will be completed, but not within the one-year timeline as set out in this recommendation.

Developing national recovery strategies and their subsequent action plans, requires cooperation and consultation with wildlife management boards, Aboriginal peoples, provincial and territorial governments, and other directly affected stakeholders.

Completion dates for action plans will be stated in the final recovery strategies, as per the requirements in the SARA. Critical habitat will be identified in each completed recovery strategy, to the extent possible. The Government of Canada commits to completing recovery strategies and action plans for boreal woodland caribou (hereafter referred to as boreal caribou) and, wood bison as expeditiously as possible. If the Peregrine Falcon status is maintained as Threatened, a recovery strategy will be completed. Should the Peregrine Falcon (*anatum* subspecies) be down-listed to special concern, as per the Committee on the Status of Endangered Wildlife in Canada's last assessment a management plan will be completed according to the requirements and timelines in the SARA.

For clarity, the Government of Canada notes that woodland caribou in the recommendation refers to the boreal population of boreal caribou and that Peregrine Falcon refers to the *anatum* sub-species.

Environment Canada is leading the recovery planning process for boreal caribou, wood bison and Peregrine Falcon.

Environment Canada will develop the national recovery strategy for boreal caribou through: 1) consultation with provincial and territorial departments responsible for conservation and natural resource management, Aboriginal groups, organizations and communities, land managers, environmental organizations, industry, and other affected parties to gather information on key elements of the national recovery strategy; 2) ensuring Aboriginal traditional knowledge about boreal caribou informs the national recovery strategy; and 3) conducting scientific studies on boreal caribou habitat needs.

As outlined in the "*Path Forward for Completion of Recovery Strategy for Woodland Caribou (Rangifer tarandus caribou), Boreal Population, in Canada*", Environment Canada is committed to developing a national recovery strategy for boreal caribou that includes the identification of critical habitat to the extent possible. In 2009, Environment Canada released the "*Scientific Review for the Identification of Critical Habitat for Woodland Caribou, Boreal Population (Rangifer tarandus caribou) in Canada*", which was a review of boreal caribou habitat requirements, and how to approach critical habitat identification for boreal caribou. Although

considerable information existed about boreal caribou habitat requirements, there was not enough information to enable the immediate identification of critical habitat under the SARA. The results of the Scientific Review, further scientific work, and knowledge of boreal caribou held by Aboriginal peoples, provincial and territorial governments, and other interested or affected parties will be used to inform the identification of boreal caribou critical habitat under the SARA.

The proposed strategy for boreal caribou will be posted on the Species at Risk Public Registry in the summer of 2011 for a 60-day comment period.

A draft of the recovery strategy for wood bison is in the final stages of preparation. After it is completed, the proposed national recovery strategy will be posted on the Species at Risk Public Registry for a 60-day comment period.

The Government of the Northwest Territories is engaged with Environment Canada in the research and development of the national recovery strategies and action plans through the National Recovery Teams. The Government of the Northwest Territories continues to cooperate in the timely development of strategies and plans for wildlife at risk under the national *Species at Risk Act*. The *Species at Risk Act (NWT)* came into force in 2010. The Government of the Northwest Territories issued a final *Boreal Woodland Caribou Action Plan (2010-2015)* in 2009 and will issue a final *NWT Wood Bison Management Strategy* in 2010.

Recommendation 10-4

The Panel recommends that the National Energy Board, as a condition of any certificate or approvals it might issue in relation to the Mackenzie Gas Project or the Northwest Alberta Facilities, require the Proponents and NOVA Gas Transmission Ltd., prior to the National Energy Board approving the final location of the pipeline route or any site for a facility included in the Mackenzie Gas Project or the Northwest Alberta Facilities, to do the following for any Listed species likely to be impacted by either project that is included in the Species At Risk Act public registry and for which the Ministers have adopted a recovery strategy and action plan:

- *complete a species-specific survey for each Listed species occurring in any Regional Study Area; and*
- *based on specific mitigative measures developed in response to the information obtained in the survey, complete an assessment of Project related impacts on each such Listed species in consideration of the requirements of the Species at Risk Act. The impact assessments should be conducted directly on the Listed species where possible rather than using one or more indicator species and be filed with Environment Canada, the Government of the Northwest Territories, Alberta Sustainable Resource Development, and all relevant resource managers and wildlife management boards for their review and response.*

The Panel further recommends that the National Energy Board take into consideration any responses received from Environment Canada, the Government of the Northwest Territories, Alberta Sustainable Resource Development, or any relevant resource managers and wildlife management boards in response to their review of the impact assessment prior to approving the

final location of the pipeline route or any site for a facility included in the Mackenzie Gas Project or the Northwest Alberta Facilities.

The Panel further recommends that the National Energy Board, as a condition of any certificate of approvals it might issue in relation to the Mackenzie Gas Project, require the Proponents, prior to the commencement of construction, to update their assessments of Listed species likely to be affected by the Mackenzie Gas Project.

Response

This recommendation was directed to the National Energy Board and the Province of Alberta.

The National Energy Board, within its “Concordance Table for JRP Recommendations and NEB Proposed Conditions”, dated 9 March 2010, has indicated that this recommendation has been addressed within its Proposed Conditions with the exception of those portions that relate to future applications.

The Government of Canada will not respond to the portions of this recommendation that are under the jurisdiction of the Province of Alberta.

The Government of Canada notes that this recommendation refers to a future application and acknowledges that the discretion of future regulatory decisions should not be fettered. Should an application for the Northwest Alberta facilities be filed, the appropriate regulatory bodies will evaluate and consider what mitigation measures are appropriate having regard, among other things, to the Environmental Impact Review for the Mackenzie Gas Project.

Environment Canada’s evidence at the National Energy Board Final Hearings clarified that where the Minister has determined that recovery of the species is not feasible, those listed species should be excluded from the requirements of the recommendation (currently only the Eskimo Curlew).

Recommendation 10-5

The Panel recommends that, prior to approval of any facility that would enable the throughput of the Mackenzie Valley Pipeline to be increased above 1.2 Bcf/d, Environment Canada conduct a regional review of the cumulative impacts on each Listed species occurring in the Project Review Area on which the proposed facility could reasonably be expected to have an impact. The regional review should be based on studies appropriate to the species in areas of potentially suitable habitat, generate results that can be used to determine mitigation options to avoid or minimize impacts on each species, and take place every five years thereafter for the life of the Mackenzie Gas Project.

Response

The Government of Canada accepts the intent of this recommendation.

Environment Canada will conduct a regional review of the cumulative impacts on each Listed species.

The Government of Canada does not agree that the completion of a regional review by Environment Canada should be a pre-condition for the approval of any facility that would increase pipeline throughput of the Mackenzie Valley Pipeline above 1.2 bcf/d. However, it is likely that Environment Canada will be able to complete one, five year cycle of studies for species at risk that occur within the Project review area before the throughput of the Mackenzie Valley Pipeline exceeds 1.2 bcf/d.

Environment Canada's review will be regional in nature and apply to all relevant land-use activities in the area, rather than specifically linked to impacts from the Mackenzie Gas Project. Organizations responsible for environmental impact assessment and proponents of specific projects will still need to consider impacts that the projects will have on Listed species and their habitat, including any cumulative environmental effects that are likely to result from the project in combination with other projects or activities that have been or will be carried out.

For greater certainty, "Listed" species are those species that are in Schedule 1 of the *Species at Risk Act*.

Recommendation 10-6

The Panel recommends that, prior to authorizing any development beyond the Project as Filed, no agency having authority to permit resource development-related activities on the lands or waters within the range of woodland caribou in the Northwest Territories or northwest Alberta issue any new land use permit, lease, licence, authorization, water use permit or licence, certificate, or other form of permission unless the regulatory instrument contains site-specific or activity-specific measures that are the same as or similar to those the Panel is recommending be conditions of any certificate or approvals the National Energy Board might issue to the Proponents or to NOVA Gas Transmission Ltd. that are for the purpose of protecting woodland caribou, more specifically, those conditions set out in Panel Recommendations 5-1 and 10-1. For greater certainty, the recommended conditions, as noted, should be applied to all oil, gas and mineral exploration and development activities as well as the placement, construction, and operation of facilities and infrastructure, within the range of woodland caribou.

Response

The Government of Canada notes that this recommendation is outside the scope of the Joint Review Panel's mandate, therefore the Government does not accept this recommendation. The "Agreement for the Environmental Impact Review of the Mackenzie Gas Project", which came into effect on August 3, 2004, sets out the specific and detailed mandate for the Joint Review Panel's environmental impact review. This recommendation goes beyond the mandate because the subject matter is to be applied to all development activities, not just the Mackenzie Gas Project or reasonably induced development associated with the Project.

The Government of Canada will not respond to the portions of this recommendation that are under the jurisdiction of the Province of Alberta.

The Government of Canada notes that this recommendation refers to a future application and

acknowledges that the discretion of future regulatory decisions should not be fettered. Should an application for the Northwest Alberta facilities be filed, the appropriate regulatory bodies will evaluate and consider what mitigation measures are appropriate having regard, among other things, to the Environmental Impact Review for the Mackenzie Gas Project.

The Governments are committed to protecting woodland caribou and note that in relation to the Mackenzie Gas Project, it is only the boreal population that is within the scope of the Project. The focus of the mitigative measures to reduce adverse cumulative impacts would be for that population. The results of further land-use planning, the development of best practices (including the draft Northwest Territories Guidance for the Protection of Land, Forest and Wildlife), and the implementation of other Panel recommendations related to protection of boreal caribou will also address this issue.

The land and water regulatory authorities are required to consider the cumulative impacts of developments and have the ability to include terms and conditions in the authorizations they issue to address identified impacts. The development of a National Recovery Strategy for boreal caribou under Recommendation 10-3 would be particularly helpful in informing regulatory authorities with respect to critical habitat.

Recommendation 10-7

The Panel recommends that the National Energy Board, as a condition of any certificate or approvals it might issue in relation to the Mackenzie Gas Project, require the Proponents to file, prior to the commencement of construction, operating procedures for the Parsons Lake airstrip. The operating procedures should minimize the environmental impacts of airstrip operations, be developed in consultation with the Inuvik and Tuktoyaktuk Hunters and Trappers Committees, and indicate how the concerns of the Hunters and Trappers Committees have been addressed. These operating procedures should receive endorsement from Transport Canada prior to being filed with the National Energy Board.

Response

This recommendation was directed to the National Energy Board.

The National Energy Board has addressed this recommendation within its Proposed Conditions dated 9 March 2010.

The Proponents have stated that they will pursue registration for the Parsons Lake airstrip. While Transport Canada requires information about an aerodrome's specifications to register it, applicants do not have to provide the department with operating procedures for endorsement. The safety of all aircraft operations is already governed by the *Aeronautics Act* and the Canadian Aviation Regulations.

Recommendation 10-8

The Panel recommends that the National Energy Board, as a condition of any certificate or approvals it might issue in relation to the Mackenzie Gas Project, require the Proponents to file,

prior to the commencement of construction, a plan to address any impacts from the Mackenzie Gas Project on the Porcupine caribou herd resulting from increased use of the Dempster Highway. This plan could be included as part of the Barren Ground Caribou Protection and Management Plan described in Panel Recommendation 10-1 or be developed in a stand-alone manner. The plan should address the concerns of and be developed in consultation with the Porcupine Caribou Management Board and the Government of Yukon. The contents, distribution and endorsement of the plan should also reflect the requirements outlined in Panel Recommendation 10-1 but be specific to the Porcupine caribou herd. As a matter of principle, the mitigation measures to reduce the impacts of vehicular traffic on wildlife should be developed and applied in a uniform and consistent manner throughout the Project Review Area.

Response

This recommendation was directed to the National Energy Board.

The National Energy Board has addressed this recommendation within its Proposed Conditions dated 9 March 2010.

The Government of the Northwest Territories will work with the Proponents and appropriate wildlife management boards in the development of a Wildlife Protection and Management Plan that addresses the intent of this recommendation.

The Governments of Canada and the Northwest Territories are members of the Porcupine Caribou Management Board and support the management efforts of the Board.

Recommendation 10-9

The Panel recommends that the Government of the Northwest Territories, within two years of the date of the Government Response to the Panel's Report, develop range management plans for the winter ranges of the Cape Bathurst and Bluenose West barren ground caribou herds that include linear and area density development thresholds. These plans should be developed in consultation with the appropriate wildlife management boards.

The Panel further recommends that these management plans be filed with the appropriate local and regional bodies responsible for environmental assessment and wildlife management, as well as with the administrative and regulatory bodies responsible for disposition of rights to land and water, for consideration when processing regulatory permits for any industrial or commercial activity in the Project Review Area that is within the winter ranges of the Cape Bathurst and Bluenose West barren ground caribou herds.

Response

The Government of the Northwest Territories accepts this recommendation.

The Government of the Northwest Territories will, as part of its overall barren-ground caribou management strategy, "Caribou Forever – Our Heritage, Our Responsibility" develop the required plan in consultation with the appropriate wildlife management boards and Aboriginal groups. The Government of the Northwest Territories will provide these plans to the appropriate

co-management organizations and regulatory authorities.

Recommendation 10-10

The Panel recommends that the Government of Canada, the Inuvialuit Land Administration and the Government of the Northwest Territories jointly develop policies to restrict the proliferation of roads and airstrips within the ranges of Cape Bathurst and Bluenose West barren ground caribou herds. Those policies should be reflected in the Range Management Plans and the setting of linear and area density development thresholds, as outlined in Panel Recommendation 10-9.

Response

The Governments of Canada and the Northwest Territories accept the intent of this recommendation.

The Governments do not agree that there is a need for specific policies to restrict the development of roads and airstrips by projects. The Governments note that there are existing mechanisms to review the impacts a proposed project may have on the environment and wildlife. Those mechanisms should be used to determine whether or not, and to what extent, any restrictions should be imposed.

The Government of the Northwest Territories, as part of the overall barren-ground caribou management strategy, will work with appropriate Aboriginal groups and parties to develop measures to protect barren-ground caribou and will apply these in the Range Management Plans.

Recommendation 10-11

The Panel recommends that the National Energy Board, as a condition of any certificate or approvals it might issue in relation to the Mackenzie Gas Project, require the Proponents to file annually during the construction phase, prior to the commencement of construction planned for the coming season, the results of their grizzly bear den surveys and whether and how grizzly bear dens would be avoided during construction. This information should also be provided to the Government of the Northwest Territories and wildlife management boards.

Response

This recommendation was directed to the National Energy Board.

The National Energy Board has addressed this recommendation within its Proposed Conditions dated 9 March 2010.

Recommendation 10-12

The Panel recommends that the governments of the Northwest Territories and Yukon and Parks Canada, within two years of the date of the Government Response to the Panel's Report, develop range management plans for grizzly bear, in consultation with the appropriate management

agencies, boards and committees.

Response

The Governments of Canada and the Northwest Territories accept the intent of this recommendation.

The Government of the Northwest Territories will focus on the Mackenzie Delta grizzly bear population and will initiate a process to identify the appropriate scope of a Mackenzie Delta grizzly bear range management plan with the Inuvialuit Game Council, Wildlife Management Advisory Council (NWT), Wildlife Management Advisory Council (North Slope) and the Gwich'in Renewable Resources Board.

For the purpose of addressing impacts to grizzly bear range, the Joint Review Panel identified two populations of grizzlies that occur in the Project Review Area: the Arctic coastal population occupying the region north and east of Inuvik with concentrations on Richards Island, and the northern interior population in the Yukon.

The Governments will not respond to the portions of this recommendation that are under the jurisdiction of the Government of Yukon.

Governments note that the Yukon Government filed its comments on the Joint Review Panel recommendations with the National Energy Board as part of the intervener comment period on February 11, 2010. It stated that it "*will consider Recommendation 10-12 when there is a proposed project for future development which has implications for Northern Yukon's grizzly bear population. When the specifics of a proposed project are known, the conservation of grizzly bear and the interests of the resource developer can be better served*".

The Government of the Northwest Territories will engage Parks Canada and the Government of the Yukon depending upon the geographic scope of the project developed by the main parties.

Recommendation 10-13

The Panel recommends that the Government of the Northwest Territories and Environment Canada immediately develop a program in relation to the southern Beaufort Sea polar bear population to:

- *delineate potential maternity denning habitat and assessment of the potential for den disturbance;*
- *assess the risk and potential impacts of offshore activities to the southern Beaufort Sea polar bear population;*
- *assess the impact of nearshore activities on Inuvialuit polar bear hunting along the nearshore areas of the southern Beaufort Sea coast from Mackenzie Bay to the Tuktoyaktuk Peninsula;*
- *identify key feeding areas in nearshore areas that are used by family groups of polar bears, especially females with young of the year just out of their maternity dens, and prime seal and bear habitat near the outer edge of the landfast ice;*

- *consider potential interaction of industrial development impacts with effects arising from climate variability and long-term climate change; and*
- *monitor the Beaufort Sea polar bear populations so that such data can inform the management plan noted in Panel Recommendation 10-14.*

Response

The Governments of Canada and the Northwest Territories accept the intent of this recommendation.

International Polar Bear research and management is guided by the international *Agreement on the Conservation of Polar Bears and Their Habitat*. Canada is a signatory to this agreement. Environment Canada played a significant advisory role in the development of the *Inuvialuit-Inupiat Polar Bear Management Agreement in the Southern Beaufort Sea* (first signed in 1988) and continues to provide advice and support to ensure fulfillment of the Agreement.

While some of the baseline information listed in this recommendation has been collected during recent studies on the southern Beaufort Sea polar bear population, such as delineation of denning habitat, information gaps still exist as do ongoing monitoring requirements of this population. However, with existing information collected by Environment Canada and partners, and future planned monitoring and research, enough information exists for the purpose of drafting a range management plan as per JRP recommendation 10-14. Should the MPG proceed, a more fulsome Southern Beaufort Sea Polar Bear Monitoring Program will be designed, and subject to funding, implemented and the new information generated will inform future iterations of the Southern Beaufort Sea Polar Bear Range Management Plan.

The Wildlife Management Advisory Committee (NWT) and Wildlife Management Advisory Committee (North Slope) have management responsibilities for polar bears in the southern Beaufort Sea. The Governments will engage with the co-management boards and other interested parties in the development of the Beaufort Sea polar bear program.

Recommendation 10-14

The Panel recommends that, within two years of the date of the Government Response to the Panel's Report, the Government of the Northwest Territories and Environment Canada develop a range management plan for polar bears in the southern Beaufort Sea Region based on information obtained from the program noted in Panel Recommendation 10-13.

Response

The Governments of Canada and the Northwest Territories accept this recommendation.

International Polar Bear research and management is guided by the international *Agreement on the Conservation of Polar Bears and Their Habitat*. Canada is a signatory to this agreement. Environment Canada played a significant advisory role in the development of the *Inuvialuit-Inupiat Polar Bear Management Agreement in the Southern Beaufort Sea* (first signed in 1988) and continues to provide advice and support to ensure fulfillment of the Agreement.

The Wildlife Management Advisory Committee (NWT) and Wildlife Management Advisory Committee (North Slope) have management responsibilities for polar bears in the southern Beaufort Sea. The Governments will engage with the co-management boards and other interested parties in the development of the Beaufort Sea polar bear range management plan. The range management plan will be an ever-green document that will be updated to reflect information generated from the Southern Beaufort Sea Polar Bear Monitoring Program as per the Government Response to recommendation 10-13.

Recommendation 10-15

The Panel recommends that, subject to any existing commitments, no government department or regulatory agency issue any rights for the exploration or development of any offshore oil and gas fields in the southern Beaufort Sea Region until the range management plan for polar bear referred to in Panel Recommendation 10-14 has been finalized and implemented.

Response

The Government of Canada does not accept this recommendation, as a prohibition on the issuance of new rights prior to finalizing and implementing a range management plan for polar bears is not warranted.

Mechanisms are in place to ensure that any proposed exploration or development activity on new exploration licences, and any exploration activities such as speculative seismic surveys unrelated to exploration licences, would undergo environmental screening and potentially environmental review. Guidance for the mitigation of effects on polar bears may be included in range management plans and could be considered by proponents and regulators when activities are proposed in the offshore. Recent development proposals for activities already include polar bear specific provisions that have been informed by recent scientific research, operational experience and traditional or local knowledge.

The Government will ensure that a polar bear management plan is in place in advance of a significant increase in oil and gas exploration and development activity in the southern Beaufort Sea Region. The Government recognizes the importance of having oil and gas exploration informed by a range management plan for polar bear to avoid unnecessary impacts on polar bear. In the interim, Indian and Northern Affairs Canada will continue to integrate polar bear range information as it carries out its responsibilities under the *Canada Petroleum Resources Act*.

The Government will continue to inform potential licence holders of particular sensitivities in the southern Beaufort Sea region and will include references to range management plans as these are formalized.

Compilations of new information on polar bear range and seasonal sensitivities that was not available for the Joint Review Panel is now online. See Indian and Northern Affairs Canada's Petroleum and Environment Management Tool (PEMT) (<http://www.ainc-inac.gc.ca/nth/og/pemt/index-eng.asp>). Maps presented on this site show interpretation of geographic and seasonal variation in Polar Bear sensitivity ranging from low across much of the Beaufort Sea in summer to moderate to high in winter. This information can improve planning

for mitigation of operations and assessment of impact.

Recommendation 10-16

The Panel recommends that the National Energy Board, as a condition of any certificate or approvals it might issue in relation to the Mackenzie Gas Project or the Northwest Alberta Facilities, require the Proponents and NOVA Gas Transmission Ltd. to include in their Wildlife Protection and Management Plans required by Panel Recommendation 10-1 for each species at risk for which there is a plausible and likely interaction with any Project-related activity or facility measures that include but are not limited to:

- *the location of any observations of Listed species or species classified as at risk or that may be at risk on the most recent NWT General Status Ranks or The General Status of Alberta Wild Species;*
- *identification of mitigation measures that:*
- *avoid or minimize disturbance;*
- *minimize the development footprint in habitats known to support Listed species;*
- *where Listed species are present, schedule activities so as to avoid disturbance;*
- *implement access management;*
- *ensure effective reporting and data sharing;*
- *minimize disturbance from vehicle and air traffic; and*
- *ensure effective communication with the public; and*
- *identification of monitoring activities that:*
- *document habitat loss and habitat change;*
- *document incidents, interactions and mortality; and*
- *assess effectiveness of access management.*

Response

This recommendation was directed to the National Energy Board and the Province of Alberta.

The National Energy Board, within its “Concordance Table for Joint Review Panel Recommendations and NEB Proposed Conditions”, dated 9 March 2010, has indicated that this recommendation has been addressed within its Proposed Conditions with the exception of those portions that relate to future applications.

The Government of Canada will not respond to the portions of this recommendation that are under the jurisdiction of the Province of Alberta.

The Government of Canada notes that this recommendation refers to a future application and acknowledges that the discretion of future regulatory decisions should not be fettered. Should an application for the Northwest Alberta facilities be filed, the appropriate regulatory bodies will evaluate and consider what mitigation measures are appropriate having regard, among other things, to the Environmental Impact Review for the Mackenzie Gas Project.

The NWT Status Ranks are updated every five years. The NWT Species 2006-2010 report will be replaced by the NWT Species 2011 – 2015 report. Under the new *Species at Risk Act (NWT)*, the Government of the Northwest Territories will develop territorial lists for wildlife at risk requiring protection after 2010.

Recommendation 10-17

The Panel recommends that the National Energy Board, as a condition of any certificate or approvals it might issue in relation to the Mackenzie Gas Project, require the Proponents to file, prior to the commencement of construction, a plan in relation to wood bison that has been endorsed by the Government of the Northwest Territories and that documents:

- *measures to avoid creation of preferred bison habitat;*
- *a monitoring program to detect wood bison use of the Mackenzie Gas Project's right-of-way; and*
- *a process to develop mitigation measures in consultation with the Government of the Northwest Territories if wood bison start using the Mackenzie Gas Project's right-of-way.*

Response

This recommendation was directed to the National Energy Board.

The National Energy Board has addressed this recommendation within its Proposed Conditions dated 9 March 2010.

The Government of the Northwest Territories notes that a final *NWT Wood Bison Management Strategy* will be issued in 2010. The Government will encourage the Proponents to incorporate guidance from the Strategy in its Wildlife Protection and Management Plans.

Recommendation 10-18

The Panel recommends that the National Energy Board, as a condition of any certificate or approval it might issue in relation to the Mackenzie Gas Project, require the Proponents to file with the Government of the Northwest Territories information they collect from their pre-construction, construction and post-construction surveys and monitoring programs in relation to short-eared owls and rusty blackbirds.

Response

This recommendation was directed to the National Energy Board.

The National Energy Board has addressed this recommendation within its Proposed Conditions dated 9 March 2010.

Recommendation 10-19

The Panel recommends that the National Energy Board, as a condition of any certificate or approvals it might issue in relation to the Mackenzie Gas Project, require the Proponents to file, prior to the commencement of construction, a Peregrine Falcon Protection and Management Plan that includes the following restrictions on Project-related activities or facilities:

<i>Restricted Activity Period</i>	<i>Activity</i>	<i>Setback Distance from Nest Site</i>
<i>April 15 to September 1</i>	<i>Permanent structures or long-term habitat disturbance (e.g. pipeline right-of-way, road, quarry, campsite, etc.)</i>	<i>1,000m</i>
<i>April 15 to September 1</i>	<i>Ground and air access</i>	<i>1,000m</i>
<i>April 15 to September 1</i>	<i>Aircraft overflight</i>	<i>760m above ground level</i>
<i>April 15 to September 1</i>	<i>Blasting</i>	<i>1,000m</i>

Response

This recommendation was directed to the National Energy Board.

The National Energy Board has addressed this recommendation within its Proposed Conditions dated 9 March 2010.

Recommendation 10-20

The Panel recommends that the National Energy Board, as a condition of any certificate or approvals it might issue in relation to the Mackenzie Gas Project, require the Proponents to file, prior to the commencement of construction, a Protection and Management Plan for Raptors, other than peregrine falcons but including bald and golden eagles, that includes the following restrictions on Project-related activities or facilities:

<i>Restricted Activity Period</i>	<i>Activity</i>	<i>Setback Distance from Nest Site</i>
<i>March 30 to July 31</i>	<i>Permanent structures or long-term habitat disturbance (e.g. pipeline right-of-way, road, quarry, campsite, etc.)</i>	<i>1,000m</i>
<i>March 30 to July 31</i>	<i>Ground and air access</i>	<i>1,000m</i>
<i>March 30 to July 31</i>	<i>Aircraft overflight</i>	<i>760m above ground level</i>
<i>March 30 to July 31</i>	<i>Blasting</i>	<i>1,000m</i>

Response

This recommendation was directed to the National Energy Board.

The National Energy Board has addressed this recommendation within its Proposed Conditions dated 9 March 2010.

Recommendation 10-21

The Panel recommends that Environment Canada, in relation to resource extractive activities, prepare a plan for compensation that addresses habitat offsets with respect to subsidence-induced habitat loss within the Kendall Island Bird Sanctuary or within any offset areas. The plan must be prepared for review and approval by the Inuvialuit Regional Corporation, the Inuvialuit Game Council and resource managers with responsibility for migratory birds or disposition of rights to lands or resources in the Kendall Island Bird Sanctuary or in potential offset areas, and be finalized within two years of the date of the Government Response to the Panel's Report. The Environment Canada plan must reflect the following:

- *the principle that habitat offsets will reflect and be based on the projected extent of subsidence-induced flooding within the Kendall Island Bird Sanctuary;*
- *the principle that the quantum of habitat that will be set aside through habitat offsets will be the amount of the projected extent of subsidence-induced flooding multiplied by an offset factor reflecting a precautionary approach to conservation, but not less than a factor of five to one;*
- *the identification of the location of the preferred offset area(s) and the actual areas recommended for offset;*
- *the schedule of fees (on a cost-recovery basis) that will be charged to proponents whose development activities would require lands to be set aside to offset the impact of their activities on migratory bird habitat;*
- *identification of the owners of the surface and subsurface of offset area(s) if the lands are not owned by the Crown; and*
- *the preferred legislative, regulatory or policy mechanism for setting aside and protecting the offset lands and the means for achieving same. The plan should apply to the subsidence effects of the Mackenzie Gas Project and to any future developments, to the extent that these may affect the Kendall Island Bird Sanctuary or any offset areas that may have been put in place. Once approved, Environment Canada should make the plan public.*

Response

The Government of Canada accepts the intent of this recommendation,

The Government notes that the two-year timeline may not be appropriate in light of the current status of the Project. The Government cannot commit to cost-recovery via fees as a compensation mechanism paid by the Proponents, but can commit to an examination of fee mechanisms.

Environment Canada has already begun to prepare a plan for habitat compensation that addresses habitat offsets with respect to subsidence-induced habitat loss within the Kendall Island Bird Sanctuary or within any offset areas. The Government of Canada also accepts that the plan should be developed in consultation with the Inuvialuit Regional Corporation, the Inuvialuit Game Council and relevant resource managers, but does not accept that the plan should be approved by these organizations.

Recommendation 10-22

The Panel recommends that, within two years of Environment Canada filing its plan as required in Panel Recommendation 10-21, the Government of Canada take the necessary steps to adopt

Environment Canada's plan and to put in place legislative and policy measures to implement it, inclusive of:

- *selection of the offset lands that will be withdrawn and the mechanisms by which those lands will be set aside and withdrawn from industrial activities;*
- *the procedures by which land issues with third-party land or rights holders will be settled; and*
- *formal protection of lands selected for offset (including permanent protection or interim protection that will be in place until it is determined that the offsets are no longer required).*

To optimize availability and protection of suitable habitat for migratory birds, formal protection of the offset lands should be completed prior to the National Energy Board granting Leave to Open under any certificate or approvals issued by the National Energy Board for or in relation to the Mackenzie Gas Project.

Response

The Government of Canada accepts the intent of this recommendation.

The Government of Canada does not accept that formal protection of the offset lands should be completed prior to the National Energy Board granting Leave to Open under any certificate or approvals issued by the National Energy Board for or in relation to the Mackenzie Gas Project.

The Government notes that the location of the offset area(s) will be determined through appropriate consultation with the Inuvialuit, Gwich'in, other governments and government departments, environmental non-government organizations and industry as appropriate. A consensus agreement will be sought on the location(s) of the offset areas.

If agreement cannot be reached within three years of the Proponent deciding to proceed with the Project, the Government will identify the location(s) after considering the collective input of the stakeholders. Offset areas will be managed by Indian and Northern Affairs Canada under the *Territorial Lands Act* or through policy instruments that provide transparency and public accountability under the *Canada Petroleum Resources Act*.

Environment Canada and Indian and Northern Affairs Canada have initiated work on a plan for habitat offset(s), and are working on its implementation and timelines.

The Inuvialuit, Gwich'in and other parties, including industry will be consulted as appropriate, on potential offset area(s).

Environment Canada and Indian and Northern Affairs Canada have already agreed that future exploration or subsurface rights will not be issued within the offset area(s). Exploration activities that would not result in permanent physical impacts (e.g. seismic) may be permitted. The habitat offsets will remain in place until it is determined that all or a portion of the offsets will be protected through legislation or are no longer required as a precautionary measure.

The Government notes that future monitoring results will be required to complete the plan.

Recommendation 10-23

The Panel recommends that, within three years of the Government Response to the Panel's Report, the Governor-in-Council develop and take steps to promulgate regulations specific to the Kendall Island Bird Sanctuary under appropriate legislation for the management of the Sanctuary and offset lands that:

- *are for the purpose of preserving and enhancing the habitat of and environment for migratory birds in accordance with the Migratory Birds Convention;*
- *incorporate the 1% policy that Environment Canada has been implementing thus far;*
- *specify whether this 1% policy applies to the land area only or to the entire area included in the Kendall Island Bird Sanctuary;*
- *prohibit the issuance of subsurface or surface rights in the Kendall Island Bird Sanctuary and offset lands to third parties; and*
- *restrict the activities, if any, that are permitted in the Kendall Island Bird Sanctuary and offset lands.*

Response

The Government of Canada accepts the intent of this recommendation.

The decision to promulgate regulations is the prerogative of the Governor in Council.

Environment Canada manages Migratory Bird Sanctuaries for the protection of migratory birds and nests as per the *Migratory Birds Convention Act* and Migratory Bird Sanctuary Regulations. Environment Canada will, on behalf of the Government of Canada, commit to explore the promulgation of regulations to implement the 1% policy within the Kendall Island Bird Sanctuary (KIBS) subject to the following:

- The Government of Canada will make best efforts to meet the three year timeline but cannot commit to it because of the need for consultation and the fact that the final decision rests with the Governor in Council.
- Any such regulations would not apply to offset lands as these will be managed by Indian and Northern Affairs Canada under the *Territorial Lands Act* or through policy instruments that provide transparency and public accountability under the *Canada Petroleum Resources Act*.

Environment Canada's 1% policy within KIBS applies to the entire area of the sanctuary, including land and water. Until such time as regulations may be promulgated by the Governor in Council, the Government of Canada will follow the 1% policy to control development, using existing authorities under the *Migratory Birds Convention Act* and Migratory Bird Sanctuary Regulations, within KIBS as previously outlined in the Environment Canada submission to the Joint Review Panel.

- The current holders of exploration licences and significant discovery licences will be able to access and develop their petroleum resources which underlie KIBS, subject to possible

restrictions or prohibitions under applicable legislation (e.g. *Migratory Birds Convention Act* and *Migratory Bird Sanctuary Regulations*).

- There will be no further issuance of exploration licences within KIBS until the actual extent of all habitat impacts (infrastructure plus subsidence-induced flooding) has been determined.
- If the total impact exceeds the one percent limit, new exploration licences may be considered when an enhanced, integrated approach to the management of subsurface and land based resources is in place to assure the sustainable development of the Mackenzie Delta.

In offset areas, future exploration or subsurface rights will not be issued, although exploration activities that would not result in permanent physical impacts (e.g. seismic) may be permitted. The habitat offsets will remain in place until it is determined that all or a portion of the offsets will be permanently protected or are no longer required as a precautionary measure.

Recommendation 10-24

The Panel recommends that the National Energy Board, as a condition of any certificate or approvals it might issue in relation to the Mackenzie Gas Project, require the Proponents to prepare an Air Operations Plan for the Taglu facility. Such a plan must identify the initiatives and procedures that will be undertaken to minimize the impact of aircraft activity on migratory birds. The plan must be developed in consultation with, and to the satisfaction of, Environment Canada, Transport Canada, and other appropriate regulatory authorities and the plan must be in place prior to the commencement of construction. The plan should describe:

- *the goals of the plan;*
- *the measures to be used to avoid, prevent or minimize adverse impacts to migratory birds, their nests, eggs or habitat;*
- *the protocols for use of the airstrip, heliport and associated facilities consistent with the goals of the plan;*
- *the program for monitoring impacts during operations and the responses proposed to address unforeseen effects;*
- *procedures for updating the plan, as required; and*
- *reporting requirements and frequency.*

Response

This recommendation was directed to the National Energy Board.

The National Energy Board has addressed this recommendation within its Proposed Conditions dated 9 March 2010.

Environment Canada will enforce the specifics of the Air Operations Plan through migratory bird sanctuary permits for facilities within the Kendall Island Bird Sanctuary. The Air Operations Plan should not be limited by the specific points outlined in this Recommendation.

The Proponents have stated that they will pursue registration for the Project's new airstrips. While Transport Canada requires information about an aerodrome's specifications in order to register it, the Proponents do not have to provide Transport Canada with an Air Operations Plan for endorsement.

Recommendation 10-25

The Panel recommends that the National Energy Board require the Proponents to include a provision in their Environmental Protection Plans that all ethylene glycol or any other fluids used by the Proponents for de-icing purposes for any Project-related activities be contained and recovered for recycling or disposal.

Response

This recommendation was directed to the National Energy Board.

The National Energy Board has addressed this recommendation within its Proposed Conditions dated 9 March 2010.

Recommendation 10-26

The Panel recommends that the National Energy Board, as a condition of any certificate or approvals it might issue in relation to the Mackenzie Gas Project, require the Proponents to design any facilities to be located in the Kendall Island Bird Sanctuary such that noise emissions from those facilities meet or are below 50 dBA at 300 m from the fence line.

Response

This recommendation was directed to the National Energy Board.

The National Energy Board has addressed this recommendation within its Proposed Conditions dated 9 March 2010.

The Government of Canada recognizes that the appropriateness, both technically and economically, of the proposed regulatory requirement will be further informed when the detailed design and Noise Impact Analysis is available and independently verified, prior to finalizing final conditions on regulatory authorizations.

A final determination of the fence line of each facility should be made during the regulatory phase of the Mackenzie Gas Project.

Noise mitigation measures for the Taglu and Niglintgak facilities will also be conditions in Migratory Bird Sanctuary permits issued by Environment Canada.

For greater certainty, the Government of Canada interprets this recommendation as continuous noise emissions, as measured under the terms and conditions of Energy Resources Conservation Board Directive 038, to not exceed 50 dBA Leq at 300 metres (40 dBA at 900 m), as measured from the fence line of the facility.

Recommendation 11-1

The Panel recommends that, within one year of the date of the Government Response to the

Panel's Report, the governments of Canada and the Northwest Territories, together with relevant Aboriginal organizations, establish a firm timeline for implementing permanent protection for existing candidate protected areas in the Mackenzie Valley.

Response

The Governments of Canada and the Northwest Territories accept this recommendation.

A timeline for implementing legislated protection for all existing candidate protected areas in the Mackenzie Valley was previously established. These timelines are set out in the work plans for each candidate protected area and are developed together with relevant Aboriginal organizations and other stakeholders. There are five existing candidate protected areas in the Mackenzie Valley all sponsored by the Canadian Wildlife Service: Edehzhie, Ts'udeniline Tu'eyeta, Shuhtagot'ine Nene, Sambaa Ke and Ka'a'gee Tu. The timeline for establishing legislated protection for these five areas is no later than March 31, 2013.

For clarity, the Governments note that all potential protected area designations are implemented through legislation. The Mackenzie Valley for the purposes of this recommendation is defined as the sixteen ecoregions affected by the Project, as identified in the Mackenzie Valley Five-Year Action Plan.

Recommendation 11-2

The Panel recommends that, within one year of the date of the Government Response to the Panel's Report, the Governor-in-Council formally withdraw from disposition the following lands for the purpose of achieving interim protection of conservation values:

- *all identified candidate protected areas awaiting interim protection;*
- *all identified areas of interest awaiting further study and assessment; and*
- *all identified Northwest Territories Protected Areas Strategy Goal 2 areas that may be required to complete a network of core representative areas in each of the 16 ecoregions in the Mackenzie Valley.*

The Panel recommends that these lands be withdrawn until such time as permanent protection is achieved for these areas as modified through final boundary determination.

Response

The Governments of Canada and the Northwest Territories accept the intent of this recommendation.

The Government will secure interim protection for sites identified through the Northwest Territories Protected Areas Strategy process.

The Protected Areas Strategy is based on an eight step process that all regions follow to advance their protected areas in the most orderly and efficient way possible. The job of initially planning protected areas lies primarily with communities, regional organizations and/or land claim bodies. In more advanced stages, where legislation is considered, the federal and territorial governments play a greater role.

Currently, all but one identified candidate protected area within the vicinity of the Project has been provided interim protection.

It is important to understand that consistent with the Protected Areas Strategy process, applications for interim land withdrawals are only completed once an area of interest has a) regional support and b) a government sponsoring agency. If these two conditions are in place, an area of interest becomes a candidate protected area and can then be considered for interim protection under step four of the process. The analysis for identifying ecologically representative areas is not a static process and is ongoing to determine which protected areas, candidate protected areas and areas of interest could meet representation goals in each ecoregion. In addition, not all identified areas of interest are located within the sixteen ecoregions identified in the Mackenzie Valley Five Year Action Plan.

There are several planning initiatives underway through which interim protection may be secured for candidate protected areas, identified areas of interest and potential Goal 2 areas. The Protected Area Strategy, land-use planning and land claims negotiations all include options for securing protection of conservation values. These processes will not be complete within one year of the date of the Governments' Response to the Panel's Report, however, the Government expects to complete interim protection for existing candidate protected areas in the Mackenzie Valley within five years.

For clarity, the Governments note that all potential protected area designations are implemented through legislation.

Recommendation 11-3

The Panel recommends that, prior to the commencement of construction, the governments of Canada and the Northwest Territories, working with all partners in the Northwest Territories Protected Areas Strategy process, complete implementation of the Mackenzie Valley Five-Year Action Plan (2004–2009), including:

- *identification and interim protection of all Goal 1 areas; and*
- *identification and interim protection of all Goal 2 areas in each of the 16 ecoregions, subject to the consent of the appropriate Aboriginal authorities in the affected settlement areas.*

Response

The Governments of Canada and the Northwest Territories accept the intent of this recommendation.

Regarding Goal 1 areas, the Northwest Territories Protected Areas Strategy (PAS) has completed implementation of the Mackenzie Valley Five Year Action Plan (2004-2009). The Protected Area Strategy has met its objective of identifying new areas in the sixteen ecoregions affected by the Project, and has secured, or is in the process of securing interim protection for all sites that have advanced to that stage (Step 4) in the PAS process.

Regarding the identification of Goal 2 areas (ecologically representative areas), in order to be consistent with land claims agreements and the Protected Area Strategy process, Aboriginal organizations must be consulted in determining and establishing an area, however, their consent is not required.

The next phase of this initiative will be carried out under the Northwest Territories Protected Areas Establishment Action Plan (2010-2015). The Government of Canada will focus on establishing and managing six National Wildlife Areas in the Northwest Territories and in completing the designation and management of the Saoyu-Edacho National Historic site. Establishing these sites will support the network of protected areas in the Mackenzie Valley. The Government of the Northwest Territories intends to evaluate six potential territorial protected areas.

The identification and protection of additional sites will be guided by the multi-stakeholder process established in the Protected Areas Strategy.

Recommendation 11-4

The Panel recommends that the Government of the Northwest Territories provide the Proponents, industry, regulatory authorities and planning boards with the results of their assessments of Goal 2 ecologically representative areas in the 16 ecoregions as they are completed.

Response

The Governments of Canada and the Northwest Territories accept this recommendation.

For clarity, the Governments note that “their assessments of Goal 2 ecologically representative areas” refers to the ecological representation analyses that are completed by the Government of the Northwest Territories.

Recommendation 11-5

The Panel recommends that the Proponents communicate and consult directly with the Northwest Territories Protected Areas Strategy Steering Committee staff during route selection for the Mackenzie Gas Project to exchange information on any matters associated with the establishment of a network of permanently protected areas that may affect or be affected by the Mackenzie Gas Project.

Response

The Governments of Canada and the Northwest Territories accept this recommendation.

Implementation of this recommendation is the responsibility of the Proponents.

For clarity, the Governments note that the Protected Areas Strategy Secretariat acts as the point of contact for the Steering Committee and could facilitate communication as appropriate.

Recommendation 11-6

The Panel recommends that, within one year of the date of the Government Response to the Panel's Report, the governments of Canada and the Northwest Territories provide the Northwest Territories Protected Areas Strategy process with sufficient financial and technical resources to complete the implementation of the Mackenzie Valley Five-Year Action Plan (2004–2009). In addition, these governments should allocate appropriate and adequate financial and technical resources annually to complete the establishment of and implementation of a network of protected areas in the Mackenzie Valley.

Response

The Governments of Canada and the Northwest Territories accept this recommendation.

The Mackenzie Valley Five Year Action Plan has been implemented and federal funding for the establishment of federal candidate protected areas within the sixteen ecoregions affected by the Project has been expended.

The next phase of this initiative will be carried out under the Northwest Territories Protected Areas Establishment Action Plan (2010-2015). Federal funding for this phase of work has been secured. The Government of Canada will focus on establishing and managing six National Wildlife Areas in the Northwest Territories and completing the designation and management of the Saoyu-Edacho National Historic site. Establishing these sites will support the network of protected areas in the Mackenzie Valley. The Government of the Northwest Territories intends to evaluate six potential territorial protected areas.

The identification and protection of additional sites will be guided by the multi-stakeholder process established in the Protected Areas Strategy.

Recommendation 11-7

The Panel recommends that, within three years of the date of the Government Response to the Panel's Report, the bodies responsible for developing Community Conservation Plans and land use plans in the Inuvialuit Settlement Region, the Gwich'in Settlement Area, the Sahtu Settlement Area and the Dehcho Region establish and incorporate landscape thresholds and limits of acceptable change for valued sociocultural and ecological components into Community Conservation Plans and regional land use plans, including, as appropriate, the core habitat and development density thresholds that apply to boreal caribou, barren ground caribou, grizzly bear, migratory birds and beluga.

Response

The Governments of Canada and the Northwest Territories note that this recommendation is outside the scope of the Joint Review Panel's mandate and therefore the Governments do not accept this recommendation. The "Agreement for the Environmental Impact Review of the Mackenzie Gas Project", which came into effect on August 3, 2004, sets out the specific and detailed mandate for the Joint Review Panel's environmental impact review. This recommendation goes beyond the mandate because it relates to land use outside of the pipeline

corridor and the Mackenzie Gas Project facilities.

The Governments will continue to work with the willing entities responsible for developing Community Conservation Plans and land use plans in the Inuvialuit Settlement Region, the Gwich'in Settlement Area, the Sahtu Settlement Area and the Dehcho region to establish and incorporate landscape thresholds and limits of acceptable change.

This work would rely on existing and new research, and focus on environmental management objectives and any reasonably foreseeable adverse cumulative impacts associated with the Mackenzie Gas Project. This work would be used to advise and assist regulatory decision-makers and would, at a minimum, address core habitat and development density thresholds that apply to boreal caribou, barren ground caribou, grizzly bear, migratory birds and beluga whales.

Recommendation 11-8

The Panel recommends that no regulatory agency issue any authorization for an activity or any authorization or approval for a facility that would enable the throughput of the Mackenzie Valley Pipeline to be increased above 1.2 Bcf/d until Community Conservation Plans and land use plans, that incorporate socio-cultural and ecological thresholds for the region in which the activity would occur or the facility would be located, have been approved by the appropriate parties.

Response

The Governments of Canada and the Northwest Territories note that this recommendation is outside the scope of the Joint Review Panel's mandate and therefore the Governments do not accept this recommendation. The "Agreement for the Environmental Impact Review of the Mackenzie Gas Project", which came into effect on August 3, 2004, sets out the specific and detailed mandate for the Joint Review Panel's environmental impact review. This recommendation goes beyond the mandate because Community Conservation Plans and land use plans described in the recommendation exceed the geographic area of the Mackenzie Gas Project.

The Governments note that future decisions of regulatory authorities should not be fettered.

The Governments will work with the entities responsible for Community Conservation Plans in the Inuvialuit Settlement Region and land use plans in the Gwich'in Settlement Area, Sahtu Settlement Area and the Dehcho region to establish and incorporate landscape thresholds and limits of acceptable change.

While the Governments of Canada and the Northwest Territories agree that the development of Community Conservation Plans and land use plans are a worthwhile exercise, the Governments are opposed to making the development of these plans a requirement for future developments. Future developments that would cause the throughput of the Mackenzie Gas Project to be increased over 1.2 Bcf/d would be subject to separate environmental screening processes that would seek to identify and mitigate any potential adverse impacts. These processes do not require the completion of Community Conservation and land use plans.

Recommendation 11-9

The Panel recommends that the bodies responsible for the development and updating of Community Conservation Plans and land use plans in each region incorporate guidance from the Wildlife Range Management Plans referred to in Panel Recommendations 10-9, 10-12 and 10-14 and any other applicable wildlife range management plans.

Response

The Governments of Canada and the Northwest Territories note that this recommendation is outside the scope of the Joint Review Panel's mandate and therefore the Governments do not accept this recommendation. The "Agreement for the Environmental Impact Review of the Mackenzie Gas Project", which came into effect on August 3, 2004, sets out the specific and detailed mandate for the Joint Review Panel's environmental impact review. This recommendation goes beyond the mandate as it deals with land uses that encompass areas beyond the pipeline corridor and the Mackenzie Gas Project facilities.

The Governments will encourage the responsible entities to incorporate guidance from the Wildlife Range Management Plans into the development and updating of Community Conservation Plans and land use plans.

This recommendation is directed to the bodies responsible for the development and updating of Community Conservation Plans and land use plans. The Governments of Canada and the Northwest Territories support the inclusion of relevant data from the Wildlife Range Management Plans into these plans.

Recommendation 11-10

The Panel recommends that within two years of the date of the Government Response to the Panel's Report, the Government of Canada, in consultation with the Inuvialuit, introduce legislative provisions that would provide legal enforceability to approved Inuvialuit Community Conservation Plans comparable to the status of approved land use plans in the Mackenzie Valley and no regulatory agency issue any authorization for an activity or any authorization or approval of a facility that would enable the throughput of the Mackenzie Valley Pipeline to be increased above 1.2 Bcf/d until the Community Conservation Plans have legal enforceability equivalent to approved land use plans in the Mackenzie Valley.

Response

The Government of Canada notes that this recommendation is outside the scope of the Joint Review Panel's mandate and therefore the Government does not accept this recommendation. The "Agreement for the Environmental Impact Review of the Mackenzie Gas Project", which came into effect on August 3, 2004, sets out the specific and detailed mandate for the Joint Review Panel's environmental impact review. This recommendation goes beyond the mandate because it deals with approval of Community Conservation Plans within the whole of the Inuvialuit Settlement Region, and is not limited to the geographic area of the Mackenzie Gas Project in the Inuvialuit Settlement Region.

The Government note that future decisions of regulatory authorities should not be fettered.

Any proposed changes to the status of Inuvialuit Community Conservation Plans may be discussed within the Inuvialuit Final Agreement implementation process. Discussions with Inuvialuit organizations would be necessary to determine if there is an interest in adjusting their negotiated resource management system that currently applies in the Inuvialuit Settlement Region to provide legal enforceability to approved Community Conservation Plans. A change of this nature would take time.

Recommendation 11-11

The Panel recommends that, within two years of the date of the Government Response to the Panel's Report, the Government of Canada, in conjunction with the relevant responsible parties, complete the proposed strategic environmental assessment of future oil and gas exploration and development in the Beaufort Sea.

Response

The Governments of Canada and the Northwest Territories accept this recommendation.

The newly funded Beaufort Regional Environmental Assessment is a multi-stakeholder initiative to sponsor regional environmental and socio-economic research that will gather new information vital to the future management of the Beaufort Sea. The targeted science program will fund research on spill preparedness and response, geotechnical and biophysical priorities, engineering requirements for safe operations, cumulative effects monitoring and assessment, climate change, waste management and information management.

This initiative will build on work previously carried out by Governments, the Inuvialuit organizations and other stakeholders under the Beaufort Sea Strategic Regional Plan of Action and the Integrated Oceans Management Plan to plan and prepare for the Mackenzie Gas Project and future oil and gas exploration and development in the Beaufort Sea.

Recommendation 11-12

The Panel recommends that Indian and Northern Affairs Canada, Environment Canada, Fisheries and Oceans Canada, and the Government of the Northwest Territories, in collaboration with the Inuvialuit Game Council, the Inuvialuit Regional Corporation, and, as appropriate, the Gwich'in Tribal Council and the Gwich'in Renewable Resources Board, and in consultation with industry, establish the greater Mackenzie Delta as a special management area prior to any authorization for an activity or any authorization or approval of a facility that would enable the throughput of the Mackenzie Valley Pipeline to be increased above 1.2 Bcf/d.

Response

The Governments of Canada and the Northwest Territories accept the intent of this recommendation.

The Governments support an integrated approach for the management of cumulative effects in the greater Mackenzie Delta. This should not, however, be a pre-condition for the approval of an activity or a facility that would enable the throughput of the Mackenzie Valley Pipeline to be increased above 1.2 Bcf/d.

The Governments note that this recommendation refers to a future regulatory decision, and that the discretion of those regulators should not be fettered. The Joint Review Panel's recommendations will be available for consideration by regulators when applications for future activities or facilities come before them.

The Governments are committed to collaborating with affected Aboriginal groups and relevant stakeholders in consultation with industry to advance integrated management of cumulative effects in the Mackenzie Delta area to accommodate and protect important wildlife, environmental and cultural values and traditional uses while allowing development to continue. A plan of action could develop approaches to identifying habitat of particular importance, a means to further the protection of such habitat, including the development where appropriate of management targets related to cumulative impact thresholds, and develop Delta specific guidelines and best practices for industry operations. This engagement would be without prejudice to existing commitments and processes which encourage sustainable economic development and specifically the orderly issuance and management of petroleum exploration rights.

Governments note that the term 'special management area' may be confused with special management zones in the Gwich'in land use plan and thus, prefer to avoid the use of this term.

The Government of Canada has launched a petroleum and environmental management tool aimed at identifying in collaboration with relevant partners to identify areas of high biological, cultural and economic value. See Indian and Northern Affairs Canada's Petroleum and Environment Management Tool (PEMT) (<http://www.ainc-inac.gc.ca/nth/og/pemt/index-eng.asp>). The products of the tool inform decisions regarding oil and gas dispositions and are available on the internet. Work is planned to expand this tool to include more information on the terrestrial portion of the Mackenzie Delta at a finer resolution. This information could help inform discussions on a plan of action for the greater Mackenzie Delta.

Recommendation 11-13

The Panel recommends that, within one year of the date of the Government Response to the Panel's Report, the governments of Canada and the Northwest Territories make available to the appropriate parties adequate financial and technical resources to support the development and implementation of the Mackenzie Delta as a special management area

Response

The Governments of Canada and the Northwest Territories do not accept this recommendation.

In advance of the Mackenzie Delta being designated as a special management area, Governments consider it to be premature to consider financial commitments as set out in the recommendation.

Governments agree with the intended purposes of a special management area in the greater Mackenzie Delta and will approach affected Aboriginal groups and relevant stakeholders to seek their collaboration to develop a plan of action in consultation with industry. This engagement would be without prejudice to existing commitments and processes which encourage sustainable economic development and specifically, the orderly issuance and management of petroleum exploration rights.

Governments note that the term ‘special management area’ may be confused with special management zones in the Gwich’in land use plan and thus, would prefer to avoid the use of this term.

Recommendation 11-14

The Panel recommends that any proposed developments on the Mackenzie River or its major tributaries that could have the effect of altering the hydrological regime of the Mackenzie Delta, and that might have environmental impacts on the values protected by the proposed special management area recommended in Panel Recommendation 11-12, be subject to a public consultation and review process that considers impacts on the Mackenzie Delta directly.

Response

The Government of Canada notes that this recommendation is outside the scope of the Joint Review Panel’s mandate and therefore the Government does not accept this recommendation. The “Agreement for the Environmental Impact Review of the Mackenzie Gas Project”, which came into effect on August 3, 2004, sets out the specific and detailed mandate for the Joint Review Panel’s environmental impact review. This recommendation goes beyond the mandate because it includes all other possible and as yet unknown activities in the Mackenzie River beyond that of the pipeline corridor and Mackenzie Gas Project facilities.

The Government of Canada agrees that any activity on the Mackenzie River or its major tributaries that could have the effect of altering the hydrological regime of the Mackenzie Delta should require an environmental assessment. The Government of Canada notes that there are regulatory regimes in place throughout the Mackenzie River drainage basin to assess and mitigate the impacts of activities on the hydrological regime of the Mackenzie River or its major tributaries. For example, there are transboundary environmental assessment provisions in both the *Mackenzie Valley Resource Management Act* and the *Canadian Environmental Assessment Act*. The Mackenzie River Basin Board created in 1997 provides a mechanism to address inter-jurisdictional issues through bilateral water agreements.

Recommendation 11-15

The Panel recommends that no regulatory agency issue any authorization for an activity or any authorization or approval for a facility in the Sahtu Settlement Area that would enable the throughput of the Mackenzie Valley Pipeline to be increased above 1.2 Bcf/d, until Indian and Northern Affairs Canada has established, through withdrawal from disposition, interim protection of lands identified in the draft Sahtu Land Use Plan as having high conservation value or traditional and cultural importance

Response

The Government of Canada notes that this recommendation is outside the scope of the Joint Review Panel's mandate and therefore the Government does not accept this recommendation. The "Agreement for the Environmental Impact Review of the Mackenzie Gas Project", which came into effect on August 3, 2004, sets out the specific and detailed mandate for the Joint Review Panel's environmental impact review. This recommendation goes beyond the mandate because the Sahtu Land Use Plan applies to geographic areas outside the pipeline corridor and the Mackenzie Gas Project facilities.

The Government notes that future decisions of regulatory authorities should not be fettered.

The Government does not agree that the completion and approval of land use plans should be a pre-condition for the approval of projects that would enable the throughput of the Mackenzie Valley Pipeline to be increased above 1.2 Bcf/d.

The Sahtu Land Use Plan is being developed pursuant to the Sahtu Dene and Metis Comprehensive Land Claim Agreement. Governments are actively working with partners to the planning process towards completion of the Sahtu Land Use Plan that will help manage future impacts that may be related to the Mackenzie Gas Project.

A great deal of progress has been made on the Sahtu Land Use Plan since the Joint Review Panel considered this topic. The Sahtu Land Use Planning Board is currently working on draft three of the Plan which is expected to be completed in 2010. A final draft is anticipated to be complete and ready for approvals in 2011. Once approved the Plan will provide protection to areas zoned for their high conservation value or traditional and cultural importance through established Conservation Zones.

The Government currently conducts consultations in Sahtu communities as part of the oil and gas rights issuance process. The Government also consults Sahtu communities when identifying and excluding proposed Conservation Zones and protected areas from disposition.

Recommendation 11-16

The Panel recommends that no regulatory agency issue any authorization for an activity or any authorization or approval for a facility in the Sahtu Settlement Area that would enable the throughput of the Mackenzie Valley Pipeline to be increased above 1.2 Bcf/d, until the Sahtu Land Use Plan has been completed and approved by the responsible parties.

Response

The Government of Canada notes that this recommendation is outside the scope of the Joint Review Panel's mandate and therefore the Government does not accept this recommendation. The "Agreement for the Environmental Impact Review of the Mackenzie Gas Project", which came into effect on August 3, 2004, sets out the specific and detailed mandate for the Joint Review Panel's environmental impact review. This recommendation goes beyond the mandate because the Sahtu Land Use Plan applies to geographic areas outside the pipeline corridor and

the Mackenzie Gas Project facilities.

The Government of Canada notes that future decisions of regulatory authorities should not be fettered.

The Government does not agree that the completion and approval of land use plans should be a pre-condition for the approval of projects that would enable the throughput of the Mackenzie Valley Pipeline to be increased above 1.2 Bcf/d.

Governments are actively working with partners to the planning process towards completion of the Sahtu Land Use Plan that will help manage future impacts that may be related to the Mackenzie Gas Project. The completion and approval of the Sahtu Land Use Plan relies on the participation and agreement of multiple parties including the Sahtu Land Use Planning Board, the Sahtu Secretariat Incorporated, and the Governments of Canada and the Northwest Territories.

A great deal of progress has been made on the Sahtu Land Use Plan since the Joint Review Panel considered this topic. The Sahtu Land Use Planning Board is currently working on draft three of the Plan which is expected in 2010. A final draft is anticipated to be complete and ready for approvals in 2011. Once approved the Plan will provide protection to areas zoned for their high conservation value or traditional and cultural importance through established Conservation Zones.

The Government currently conducts consultations in Sahtu communities as part of the oil and gas rights issuance process. The Government also consults Sahtu communities when identifying and excluding proposed Conservation Zones and protected areas from disposition.

Recommendation 11-17

The Panel recommends that the governments of Canada and the Northwest Territories make available immediately to the appropriate parties sufficient financial and technical resources to complete and approve the Sahtu Land Use Plan.

Response

The Government of Canada notes that this recommendation is outside the scope of the Joint Review Panel's mandate and therefore the Government does not accept this recommendation. The "Agreement for the Environmental Impact Review of the Mackenzie Gas Project", which came into effect on August 3, 2004, sets out the specific and detailed mandate for the Joint Review Panel's environmental impact review. This recommendation goes beyond the mandate because the Sahtu Land Use Plan applies to geographic areas outside the pipeline corridor and the Mackenzie Gas Project facilities.

The Government of Canada continues to provide appropriate financial and technical resources to the Sahtu Land Use Planning Board to advance the completion and approval of the Sahtu Land Use Plan, consistent with the Sahtu Dene and Metis Comprehensive Land Claim Agreement.

The completion and approval of the Sahtu Land Use Plan relies on the participation and agreement of multiple parties including the Sahtu Land Use Planning Board, the Sahtu Secretariat Incorporated, and the Governments of Canada and the Northwest Territories.

A great deal of progress has been made on the Sahtu Land Use Plan since the Joint Review Panel considered this topic. The Sahtu Land Use Planning Board is currently working on draft three of the Plan which is expected to be completed in 2010. A final draft is anticipated to be complete and ready for approvals in 2011.

Recommendation 11-18

The Panel recommends that no regulatory agency issue any authorization for an activity or authorization or approval for any facility in the Dehcho Region that would enable the throughput of the Mackenzie Valley Pipeline to be increased above 1.2 Bcf/d until the Dehcho First Nations and the governments of the Northwest Territories and Canada approve a Dehcho Land Use Plan.

Response

The Government of Canada notes that this recommendation is outside the scope of the Joint Review Panel's mandate and therefore the Government does not accept this recommendation. The "Agreement for the Environmental Impact Review of the Mackenzie Gas Project", which came into effect on August 3, 2004, sets out the specific and detailed mandate for the Joint Review Panel's environmental impact review. The completion of a Dehcho Land Use Plan for the entire Dehcho region goes beyond the mandate because it involves lands outside the pipeline corridor and the Mackenzie Gas Project facilities.

The Government notes that future decisions of regulatory authorities should not be fettered.

The Government does not agree that the completion and approval of land use plans should be a pre-condition for the approval of projects that would enable the throughput of the Mackenzie Valley Pipeline to be increased above 1.2 Bcf/d.

The completion of an interim Dehcho Land Use Plan relies on the participation and agreement of multiple parties including the Dehcho Land Use Planning Committee, the Dehcho First Nations and the Government of Northwest Territories. The Government of Canada is committed to working with willing partners towards the completion of an interim Dehcho Land Use Plan.

Since the Joint Review Panel considered this topic, a revised Terms of Reference for the Dehcho Land Use Plan was agreed to by the Dehcho First Nations and the Governments of Canada and the Northwest Territories. Efforts are underway to reach agreement on a revised Interim Dehcho Land Use Plan. This work is being done in conjunction with the Dehcho Process. The Government of Canada agrees that an approved Interim Dehcho Land Use Plan will contribute to responsible, effective and transparent land and resource management in the Dehcho Region. A Plan will assist with the assessment, monitoring and management of cumulative impacts from the Mackenzie Gas Project in combination with other developments in the Region.

Recommendation 12-1

The Panel recommends that the Governor-in-Council, pursuant to section 8 of the Territorial Lands Act, as a condition of disposing of any federal Crown land required for the Mackenzie Gas Project, require the Proponents to conclude a harvester compensation agreement for each of the Inuvialuit Settlement Region, the Gwich'in Settlement Area, the Sahtu Settlement Area and the Dehcho Region of the Northwest Territories.

The Panel further recommends that in each of the above noted regions the agreements be concluded with a single harvester organization that acts on behalf of all harvesters in the region, that the Government of Canada provide funds to each regional harvester organization to negotiate harvester compensation agreements with the Proponents, and that each agreement address, at a minimum, the following:

- *the scope of coverage (what is eligible for compensation);*
- *eligibility criteria (who is eligible for compensation);*
- *categories of remedies available and choices available to the claimant;*
- *the specific process for making compensation claims (the steps required of the claimant and of the Proponents);*
- *the information required to substantiate a claim (both burden of proof and extent of loss);*
- *roles and responsibilities of each party to the agreement in processing and, if necessary, adjudicating compensation claims;*
- *any additional resources that may be required by Aboriginal authorities that have responsibilities for assisting harvesters with their claims;*
- *the time frame for reviewing and awarding a claim;*
- *the process for communicating and informing harvesters about the compensation program;*
- *provision for mediation;*
- *a dispute resolution mechanism;*
- *the enforceability of the agreement; and*
- *any other matter of importance to either party to the agreement.*

Response

The Government of Canada accepts the intent of this recommendation

The Government of Canada's response as it pertains to harvester compensation is only applicable to Aboriginal groups.

Harvester compensation processes are outlined within the Inuvialuit, Gwich'in and Sahtu Comprehensive Land Claims Agreements. In the case of the Dehcho, the Government expects that the Proponents will negotiate a harvester compensation agreement and inform Indian and Northern Affairs Canada that an agreement has been successfully completed prior to any land dispositions.

Negotiations on access and benefit agreements, including harvester compensation, are between

the Proponents and Aboriginal groups. The Government of Canada is not involved in these negotiations. Access and benefit agreements involving the Inuvialuit, Gwich'in First Nations and Sahtu First Nations have already been completed. Negotiations with the Dehcho First Nations are ongoing.

If the parties are unable to reach an agreement, the Proponents will be directed to file a report on the negotiations for consideration by Indian and Northern Affairs Canada prior to any land dispositions in the Dehcho region.

Recommendation 12-2

The Panel recommends that the National Energy Board, as a condition of any certificate or approvals it might issue in relation to the Mackenzie Gas Project, require the Proponents to file the completed harvester compensation agreements (referred to in Panel Recommendation 12-1) with the National Energy Board six months prior to the commencement of construction and to communicate the substance of each agreement with all affected harvesters no later than two months after filing the completed agreement.

Response

This recommendation was directed to the National Energy Board.

The National Energy Board, within its “Concordance Table for Joint Review Panel Recommendations and NEB Proposed Conditions”, dated 9 March 2010, has indicated that this recommendation falls within the jurisdiction of other regulatory authorities specified in land claims agreements.

The Government of Canada does not accept this recommendation. Negotiations on access and benefit agreements, including harvester compensation, are between the Proponents and Aboriginal groups. The Government of Canada is not involved in these negotiations. With regards to the specific matter of communication with affected harvesters, the Government would expect harvester compensation matters to be communicated to affected harvesters by regional harvester organizations.

Recommendation 12-3

The Panel recommends that the Government of Canada, when disposing of federal Crown land for the purposes of oil and gas development in the Northwest Territories, require the proponent to comply with the same or equivalent conditions, mitigation measures or commitments with respect to harvester compensation agreements as govern the Proponents of the Mackenzie Gas Project.

Response

The Government of Canada notes that this recommendation is outside the scope of the Joint Review Panel’s mandate and therefore the Government does not accept this recommendation. The “Agreement for the Environmental Impact Review of the Mackenzie Gas Project”, which came into effect on August 3, 2004, sets out the specific and detailed mandate for the Joint

Review Panel's environmental impact review. This recommendation goes beyond the mandate because it pertains to the disposal of federal Crown land for the purposes of all future oil and gas development in the Northwest Territories beyond the requirements of the Mackenzie Gas Project or any reasonably induced development associated with the Project.

The Government notes that harvester compensation is a subject matter included in comprehensive land claims agreements. In areas where land claims have been settled, a process exists to arrive at compensation settlements. In other areas, in the absence of a process to arrive at a settlement, the Government would expect reasonable efforts to be employed to reach an agreement. Government practices regarding Crown land dispositions are consistent with the harvester compensation provisions negotiated in the three settled comprehensive land claims.

Recommendation 12-4

The Panel recommends that the Government of Alberta, as a condition of disposing of any provincial Crown land required for the Northwest Alberta Facilities, require NOVA Gas Transmission Ltd. to conclude a harvester compensation agreement with the Dene Tha' First Nation prior to the commencement of construction of the Northwest Alberta Facilities.

The Panel further recommends that NOVA Gas Transmission Ltd. conclude the harvester compensation agreement with the Dene Tha' First Nation, or other harvester organization that acts on behalf of all harvesters in the region that might be affected by the Northwest Alberta Facilities, that Indian and Northern Affairs Canada provide funds to the Dene Tha' First Nation or other harvester organization to negotiate the harvester compensation agreement with NOVA Gas Transmission Ltd., and that the agreement address, as a minimum, the following:

- *the scope of coverage (what is eligible for compensation);*
- *eligibility criteria (who is eligible for compensation);*
- *categories of remedies available and choices available to the claimant;*
- *the specific process for making compensation claims (the steps required of the claimant and of NOVA Gas Transmission Ltd.);*
- *the information required to substantiate a claim (both burden of proof and extent of loss);*
- *roles and responsibilities of each party to the agreement in processing and, if necessary, adjudicating compensation claims;*
- *any additional resources that may be required by Aboriginal authorities that have responsibilities for assisting harvesters with their claims;*
- *the time frame for reviewing and awarding a claim;*
- *the process for communicating and informing harvesters about the compensation program;*
- *provision for mediation;*
- *a dispute resolution mechanism;*
- *the enforceability of the agreement; and*
- *any other matter of importance to either party to the agreement*

Response

This recommendation was directed to the Province of Alberta.

The Government of Canada will not respond to recommendations that are under the jurisdiction of the Province of Alberta.

The Government of Canada notes that it is premature to consider providing funds to the Dene Tha' First Nation or other harvester organizations to negotiate the harvester compensation agreements with Nova Gas Transmission Limited as there is no application for the Northwest Alberta facilities before the National Energy Board.

Recommendation 12-5

The Panel recommends that the appropriate regulatory authority, as a condition of any licence or authorization it might issue in relation to the Northwest Alberta Facilities, require NOVA Gas Transmission Ltd. to file the concluded harvester compensation agreement (referred to in Panel Recommendation 12-4) six months prior to the commencement of construction of the Northwest Alberta Facilities and to communicate the substance of the agreement to all affected harvesters no later than two months after filing the completed agreement.

Response

The Government of Canada does not accept this recommendation.

There is no application before any regulatory authority for the Northwest Alberta facilities.

The Government notes that future decisions of regulatory authorities should not be fettered.

Future developments will be evaluated and considered by relevant regulators on an individual basis upon receipt of application for such a project. However, the Joint Review Panel's recommendations will be available for consideration by the National Energy Board should applications for the future facilities come before it.

Recommendation 12-6

The Panel recommends that the National Energy Board include as conditions of any certificate or approvals it might issue in relation to Mackenzie Gas Project facilities in the Inuvialuit Settlement Region:

- *the specific commitments as set out in Section 12.5.1 of this Report that the Proponents have made with respect to mitigating negative impacts on wildlife harvesting in the Inuvialuit Settlement Region; and*
- *evidence of financial responsibility in a form and amount satisfactory to the National Energy Board to cover the liability from individual Proponents as described in the estimates for the worst-case scenario in the Inuvialuit Settlement Region and as set out in Section 12.5.3 of this Report*

Response

This recommendation was directed to the National Energy Board.

The National Energy Board has addressed this recommendation within its Proposed Conditions dated 9 March 2010.

Recommendation 13-1

The Panel recommends that:

(a) No pit or quarry permit in the Northwest Territories be issued to the Proponents in relation to the Mackenzie Gas Project by Indian and Northern Affairs Canada or any Aboriginal or private land owner until the Proponents file with the landowner geotechnical information and a Pit or Quarry Management Plan for each borrow pit or quarry from which they intend to extract granular resources for the Mackenzie Gas Project.

(b) Indian and Northern Affairs Canada develop a Granular Management Plan that includes the Inuvialuit Settlement Region, the Gwich'in Settlement Area, the Sahtu Settlement Area and the Dehcho Region using information obtained in Panel Recommendation 13-1(a) as well as existing information. The Granular Management Plan must be developed in consultation with owners of Aboriginal private lands and the Government of the Northwest Territories and be endorsed by the Government of the Northwest Territories. The Granular Management Plan is to be developed within two years of the date of the Government Response to the Panel's Report.

(c) The Granular Management Plan be based on the following principles: granular resources are finite and non-renewable; granular resources must be managed according to impact thresholds; and priority allocations be given to Northwest Territories community and regional needs.

(d) Following completion of the Granular Management Plan in Panel Recommendation 13-1(b), Indian and Northern Affairs Canada and any Aboriginal or private land owner issue only a pit or quarry permit for granular resources in the Mackenzie Delta or Mackenzie Valley that is informed by, and consistent with, the Granular Management Plan.

(e) Indian and Northern Affairs Canada, in consultation with owners of Aboriginal private lands and the Government of the Northwest Territories, maintain and update its granular resource database and the Granular Management Plan identified in Panel Recommendation 13-1(b) at least every five years.

Response

The Government of Canada accepts the intent of this recommendation.

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 Proponents should be consistent with the resource owner's Management Plan.

Indian and Northern Affairs Canada, 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. The current regulatory process encourages the participation of affected Aboriginal groups and stakeholders.

Indian and Northern Affairs Canada agrees (with 13-1a) that the Proponent be required to submit geotechnical information and a pit or quarry development plan for each borrow pit or quarry prior to permitting. Indian and Northern Affairs Canada agree with the development of a Granular Management Plan and will continue to work towards development and implementation of a plan for Crown lands in the Project area.

The Government of Canada accepts in principle taking a regional approach to granular resource management and could achieve this through a co-management agreement or process. Clarification is required to ensure consistent interpretation of the concerns of landowners and major public users.

Indian and Northern Affairs Canada will seek the participation of Aboriginal private landowners and the Government of the Northwest Territories in co-management arrangements that might extend the plan to the lands they control. The Government of Canada accepts, in principle, recommendations 13-1(b), (c) and (e) with the proviso that the land owners are able to enter into co-management arrangement(s) to allow for the development of a consolidated or separate regional co-management plans for granular resources in the Mackenzie Delta and Valley. The Government of the Northwest Territories, as one of the principal users of the resource, will be integral to the development of the Plan and the identification of alternate sources as the situation demands.

The Government of Canada has responsibility for the management of granular resources on Federal Crown land and thus, cannot ensure that there will be a single database or Plan as recommended in 13-1(e). While such a database is in the preliminary stages of development, a co-management process will need to be in place for all resource owners to adhere to the Plan.

The Government of Canada does not accept the proposed timeline (13-1b), or the extension of the Plan beyond the temporal and geographic scope of the Project (13-1b, d). Furthermore, the Government is not accountable for actions of other levels of government or private landowners for activities on their lands and does not agree to make project approval or commencement of construction conditional on their actions.

Recommendation 13-2

The Panel recommends that the National Energy Board not approve any facility that would enable the throughput of the Mackenzie Valley Pipeline to be increased above 1.2 Bcf/d until the Granular Management Plan in Panel Recommendation 13-1(b) is completed.

Response

This recommendation was directed to the National Energy Board.

The National Energy Board, within its “Concordance Table for JRP Recommendations and NEB Proposed Conditions”, dated 9 March 2010, has indicated that this recommendation is outside the scope of the Mackenzie Gas Project applications as it involves future applications.

The Government of Canada will work to complete the Granular Management Plan in accordance with the Government’s Response to recommendation 13-1. The Government of the Northwest Territories will cooperate with Indian and Northern Affairs Canada in the implementation of the required granular plan. The Government of Canada notes that an increase in throughput may not require the use of additional granular materials beyond that which may be necessary for routine maintenance of the facilities identified as part of the Project and thus, should not be tied to the requirement for an approved Granular Management Plan for the Mackenzie Delta and Valley.

Recommendation 13-3

The Panel recommends that the National Energy Board, as a condition of any certificate or approvals it might issue in relation to the Mackenzie Gas Project, require the Proponents to notify and consult with Aboriginal and municipal authorities in each community proximate to the Mackenzie Valley Pipeline right-of-way with regard to community use of merchantable timber that would be cleared along the Mackenzie Valley Pipeline right-of-way. Where consultations lead to an agreement between the parties with respect to the decking of, and liability for, cleared timber, these agreements must be filed with the National Energy Board prior to the commencement of construction of the relevant spread.

Response

This recommendation was directed to the National Energy Board.

The National Energy Board has addressed this recommendation within its Proposed Conditions dated 9 March 2010.

Recommendation 13-4

The Panel recommends that the Government of the Northwest Territories, with the involvement of the Proponents and Aboriginal authorities in those Northwest Territories Project Review Area communities that have either existing sawmilling capabilities or propose to acquire these capabilities, conduct a feasibility study for the potential supply of Northwest Territories-produced timber products to the Mackenzie Gas Project. The feasibility study should be completed and made public within six months of the Proponents’ Decision to Construct.

Response

The Government of the Northwest Territories accepts this recommendation.

The Government of the Northwest Territories is engaged with communities in the development of economic activities including sawmilling. The Proponents have committed to conducting a right-of-way inventory which will contribute to the development of a feasibility study for appropriate communities.

Recommendation 13-5

The Panel recommends that:

(a) The Mackenzie Valley Land and Water Board and Indian and Northern Affairs Canada, as a condition of any licence or permit they might issue in relation to the Mackenzie Gas Project, require the Proponents to file heritage resources impact assessments for all Project-related facilities, including borrow pits and quarries, that have been completed to the satisfaction of the Prince of Wales Northern Heritage Centre.

(b) The Mackenzie Gas Project heritage resources impact assessments referred to in Panel Recommendation 13-5(a) be completed and submitted to the Prince of Wales Northern Heritage Centre sequentially by pipeline right-of-way clearing spread and in the order that the spreads are scheduled to be cleared, and that the assessments for each spread be filed at least six months prior to the proposed commencement of Project-related clearing or construction activity on each respective spread.

Response

The Governments of Canada and the Northwest Territories accept the intent of this recommendation.

The Governments note that this recommendation can be more appropriately discharged under the authority of the Government of the Northwest Territories – Prince of Wales Northern Heritage Centre, rather than the Mackenzie Valley Land and Water Board and Indian and Northern Affairs Canada as stated in the recommendation.

The Proponents have committed to determine mitigation strategies for heritage resources throughout the Project final design and construction phases with the Prince of Wales Northern Heritage Centre and local communities.

The Proponents also committed to prepare an archaeological impact assessment for all project-related facilities, including borrow pits and quarries, to the satisfaction of the Prince of Wales Northern Heritage Centre under permits issued pursuant to the Northwest Territories Archaeological Sites Regulation.

The assessments for each spread should be filed with the Prince of Wales Northern Heritage Centre at least two months prior to the proposed commencement of Project-related clearing or construction activity on each respective spread.

The Government of the Northwest Territories is committed to implementing the archaeological permitting process to the extent of its authority.

Recommendation 13-6

The Panel recommends that:

(a) The Mackenzie Valley Land and Water Board and Indian and Northern Affairs Canada as a condition of any licence or permit they might issue in relation to the Mackenzie Gas Project, require the Proponents to file, at least one month prior to the commencement of construction, a

final Heritage Resources Management Plan as approved by the Prince of Wales Northern Heritage Centre.

(b) The National Energy Board, as a condition of any certificate or approvals it might issue in relation to the Mackenzie Gas Project, require the Proponents to file, at least one month prior to the commencement of construction, the Heritage Resources Management Plan, as approved by the Prince of Wales Northern Heritage Centre.

Response

The Governments of Canada and the Northwest Territories accept the intent of this recommendation.

The Governments note that this recommendation can be more appropriately discharged under the authority of the Government of the Northwest Territories – Prince of Wales Northern Heritage Centre, rather than the Mackenzie Valley Land and Water Board and Indian and Northern Affairs Canada as stated in the recommendation. It should be noted that the existing regulatory regime includes provisions to avoid an unauthorized disturbance of an archaeological site or burial ground.

Regarding recommendation 13-6 (a), the Governments direct the Proponents to file a final Heritage Resources Management Plan with the Government of the Northwest Territories as reviewed by the Prince of Wales Northern Heritage Centre. The Proponents are committed to determine mitigation strategies for heritage resources throughout the Project final design and construction phases with the Prince of Wales Northern Heritage Centre and local communities.

Regarding recommendation 13-6(b), the National Energy Board has addressed this recommendation within its Proposed Conditions dated 9 March 2010.

Recommendation 14-1

The Panel recommends that the National Energy Board, as a condition of any certificate or approvals it might issue in relation to the Mackenzie Gas Project, require the Proponents to file, six months prior to the commencement of construction, a Transportation and Logistics Plan, approved by the Government of the Northwest Territories, that documents measures to:

- *maintain or enhance safety on the Northwest Territories' highway system, including winter roads, as a result of Project-related traffic;*
- *facilitate traffic flow as a result of Project-related traffic;*
- *ensure community access at all times in the event of an emergency during construction of the Project; and*
- *guarantee community resupply during construction of the Project.*

The plan must be developed in consultation with affected communities.

Response

This recommendation was directed to the National Energy Board.

The National Energy Board, within its “Concordance Table for JRP Recommendations and NEB Proposed Conditions”, dated 9 March 2010, has indicated that this recommendation falls within the jurisdiction of the Government of the Northwest Territories.

The Government of the Northwest Territories accepts this recommendation.

The Government notes that several provisions in the Mackenzie Gas Project Socio-Economic Agreement (MGP SEA) address these matters. The Proponents committed to provide to the Government of the Northwest Territories an updated Project transportation and logistics plan including contingency options (MGP SEA section 5.3.3); to consult with affected communities and the Government of the Northwest Territories to develop measures to address public safety on highways and roads (MGP SEA section 5.3.7); to develop a detailed set of emergency response plans and emergency procedures dealing with emergencies (MGP SEA section 5.5.1); to collaborate with the Government of the Northwest Territories and local governments to develop and maintain emergency planning and response arrangements (MGP SEA section 5.5.2); and to consider locating emergency response units along road and highways systems where appropriate (MGP SEA section 5.5.3).

Recommendation 14-2

The Panel recommends that the National Energy Board, as a condition of any certificate or approvals it might issue in relation to the Mackenzie Gas Project, require the Proponents to demonstrate, at least six months prior to the commencement of construction, that they have concluded fee-for-service agreements with affected communities respecting the use of community services or infrastructure facilities.

Response

This recommendation was directed to the National Energy Board.

The National Energy Board has addressed this recommendation within its Proposed Conditions dated 9 March 2010.

The Government of the Northwest Territories notes that the Mackenzie Gas Project Socio-Economic Agreement (MGP SEA) contains provisions related to fee-for-service agreements. The Proponents have committed to negotiating agreements, if appropriate, with the municipalities of Inuvik, Norman Wells, Fort Simpson and Hay River (MGP SEA section 5.3.8). If similar agreements are required for other communities, the Proponents will negotiate these agreements with each community or the Government of the Northwest Territories, as appropriate (MGP SEA section 5.3.9).

Recommendation 14-3

The Panel recommends that the National Energy Board, as a condition of any certificate or approvals it might issue in relation to the Mackenzie Gas Project, require the Proponents to file with the National Energy Board and the Government of the Northwest Territories, prior to the commencement of construction, a Waste Management Plan that incorporates all of the

Proponents' commitments and regulatory requirements. The plan should also include reporting requirements developed in consultation with the Government of the Northwest Territories.

Response

This recommendation was directed to the National Energy Board.

The National Energy Board has addressed this recommendation within its Proposed Conditions dated 9 March 2010.

Environment Canada, Indian and Northern Affairs Canada and the Government of the Northwest Territories will work with the Proponents in the development of a Waste Management Plan that addresses the intent of this recommendation.

Recommendation 15-1

The Panel recommends that, should the Project proceed, the Proponents and the Dehcho First Nations make best efforts to finalize a Benefit Agreement with respect to the Mackenzie Gas Project and that this agreement be concluded at least six months prior to the commencement of construction in the Dehcho Region. If the Proponents and the Dehcho First Nations are not able to conclude the Benefit Agreement negotiations in that time frame, the Panel recommends that the Proponents negotiate infrastructure and construction "set-aside" contracts with Dehcho First Nations business entities and that these negotiations be concluded prior to the commencement of construction in the Dehcho Region.

Response

The Governments of Canada and the Northwest Territories accept the intent of this recommendation.

The Governments encourage the Proponents and the Dehcho First Nations to finalize a Benefit Agreement with respect to the Mackenzie Gas Project on a priority basis. The Governments do not, however, have the legal means to compel either party to conclude a Benefit Agreement as a condition precedent to the issuance of authorizations for the Project.

The Governments of Canada and the Northwest Territories believe that it is in the best interests of parties to reach mutually acceptable agreements, including, if applicable, infrastructure and "set-aside" contracts, prior to the beginning of the Project and in sufficient time for Dehcho First Nations business entities to get ready to execute infrastructure and/or "set-aside" contracts.

Recommendation 15-2

The Panel recommends that the Government of Canada immediately restore funding to at least previous levels for literacy programs in the Northwest Territories and Yukon Territory.

Response

The Government of Canada accepts the intent of this recommendation.

The Government notes that the funding mechanisms through which literacy funding is provided have evolved.

The Government of Canada recognizes that the importance of strengthening literacy and essential skills outcomes in the North is an area of joint concern. The Government of Canada expects to continue to collaborate with Territorial Governments and Aboriginal communities in matters of basic skills development to meet labour market demands.

Recommendation 15-3

The Panel recommends that the Government of the Northwest Territories immediately assume the responsibility for coordinating implementation of training plans related to the construction phase of the Mackenzie Gas Project.

Response

The Government of the Northwest Territories accepts the intent of this recommendation.

The Government of the Northwest Territories is prepared to work with stakeholders to coordinate the implementation of training plans related to the construction phase for this shared responsibility. Although the Government of the Northwest Territories has no authority over other stakeholders who have their own training plans and funding, such as the Aboriginal groups or pipeline craft unions, efforts will be made to facilitate information sharing and other cooperative actions.

Recommendation 15-4

The Panel recommends that governments and industry collaborate to further fund the Aboriginal Skills and Employment Partnership program so as to deliver transferable construction trades training for Northwest Territories residents and that this program re-commence immediately following a Decision to Construct by the Proponents.

Response

The Governments of Canada and the Northwest Territories accept the intent of this recommendation.

The Government of Canada notes that funds under the Aboriginal Skills and Employment Partnership Program cited in the recommendation are fully committed to March 31, 2012, when the Program is due to end.

If additional training programs are needed to mitigate the socio-economic impacts of the Mackenzie Gas Project, the Governments expect that the Regional Organizations would seek funding from the Corporation for the Mitigation of Mackenzie Gas Project Impacts as established pursuant to the *Mackenzie Gas Project Impacts Act* for the additional programs.

Recommendation 15-5

The Panel recommends that the Proponents, following their Decision to Construct, and should the Proponents decide that the Mackenzie Valley Pipeline and the Mackenzie Gathering System

be a union project, require their contractors as soon as practical to enter into a project labour agreement with the pipeline craft unions that includes commitments made by Northern Pipeline Projects Ltd. during the Panel's hearings to:

- *streamline and simplify the process for northerners to join the pipeline craft unions, including the lowering of initiation fees;*
- *promote and provide training of northerners for pipeline employment;*
- *promote northern hire, including preferential hiring of union trained northerners; and*
- *contribute to positive and equitable conditions during the construction phase of the Mackenzie Gas Project.*

The Panel further recommends that the craft unions consult with the Government of the Northwest Territories in relation to the coordination of training plan implementation as referred to in Panel Recommendation 15-3.

Response

The Governments of Canada and the Northwest Territories accept the intent of this recommendation.

Implementation of this recommendation is the responsibility of the Proponents.

The Governments note that the implementation of this recommendation must be consistent with relevant federal, territorial and provincial labour and human rights legislation.

The Governments do not have the legal means to compel the Proponents or their contractors to enter into a project labour agreement with the pipeline craft unions that includes commitments made by Northern Pipeline Projects Ltd. during the Panel's hearings as a precondition to the issuance of authorizations for the Project.

As an intervenor in the Joint Review Panel process, Northern Pipeline Projects Ltd. cannot make binding commitments, however, the Governments note that the concepts provided by Northern Pipeline Projects Ltd. should be considered in any potential project labour agreement.

The Government of the Northwest Territories will work with the pipeline craft unions as part of its efforts to work with stakeholders to coordinate the implementation of training plans as noted in recommendation 15-3.

Recommendation 15-6

The Panel recommends that the Proponents and their partners re-commence, as soon as practical following the Proponents' Decision to Construct, the Pipeline Facilities Operations Training Program to deliver operations training for Northwest Territories residents and that this program continue for as long as the parties to the program deem necessary.

Response

The Governments of Canada and the Northwest Territories accept the intent of this recommendation.

Implementation of this recommendation is the responsibility of the Proponents.

The Governments note that the Pipeline Facilities Operations Training Program was partially funded by a project under the Aboriginal Skills and Employment Partnership Program which ended in 2009. Funding for the Aboriginal Skills and Employment Partnership Program is fully committed to March 31, 2012, when the Program is due to end.

The Government of the Northwest Territories notes it is committed to working with the Proponents to provide training and further notes that the Mackenzie Gas Project Socio-Economic Agreement (MGP SEA) Training Fund (MGP SEA sections 2.5.5, 2.5.6 and 2.6.2) or other future sources of training funding that arise may be utilized to fund the Pipeline Facilities Operations Training Program should the Proponents decide to construct the pipeline.

If additional training programs are needed to mitigate the socio-economic impact of the Mackenzie Gas Project, the Governments expect that the Regional Organizations would seek funding from the Corporation for the Mitigation of Mackenzie Gas Project Impacts as established pursuant to the *Mackenzie Gas Project Impacts Act* for the additional programs.

Recommendation 15-7

The Panel recommends that the Proponents immediately expand their Human Resource Training and Employment Database for the Mackenzie Gas Project to include the Yukon Territory.

Response

The Government of Canada accepts the intent of this recommendation.

Implementation of this recommendation is the responsibility of the Proponents.

The Government of Canada notes that the Proponents have already made a commitment to expand their Human Resource Training and Employment Database to the Yukon.

Recommendation 15-8

The Panel recommends that the Proponents, immediately following their Decision to Construct designate Whitehorse as a point-of-hire from which Mackenzie Gas Project employees would be transported to and from worksites at the Proponents' expense, or at the expense of their contractors.

Response

The Government of Canada accepts the intent of this recommendation.

Implementation of this recommendation is the responsibility of the Proponents.

The Government of Canada notes that the Proponents have already designated Whitehorse as a

point-of-hire for the Mackenzie Gas Project.

Recommendation 15-9

The Panel recommends that the National Energy Board, as a condition of any certificate or approvals it might issue in relation to the Mackenzie Gas Project, require the Proponents to file, three months prior to the commencement of construction, diversity plans, inclusive of gender equality, for both the construction and operations phases of the Mackenzie Gas Project. The plans should include:

- *methods for determining goals;*
- *identification of goals;*
- *methods of employee recruitment, selection, and development to achieve the identified goals;*
- *commitments to the provision of a healthy and safe work environment;*
- *steps to create a Diversity Management Committee;*
- *a monitoring and reporting system; and*
- *a communications plan.*

The Panel further recommends that the Proponents require their contractors and subcontractors to comply with the Proponents' diversity plans and that this compliance be made a term of the contract between Proponents and their contractors.

Response

This recommendation was directed to the National Energy Board.

The National Energy Board has addressed this recommendation within its Proposed Conditions dated 9 March 2010.

Recommendation 15-10

The Panel recommends that the National Energy Board, as a condition of any certificate or approvals it might issue in relation to a facility that would enable the throughput Mackenzie Valley Pipeline to be increased above 0.83 Bcf/d, require the proponent of such facility to pay for the cost of transportation for all project workers who are NWT residents to travel to and from their respective home communities to a designated point-of-hire for each work rotation.

Response

This recommendation was directed to the National Energy Board.

The National Energy Board, within its "Concordance Table for JRP Recommendations and NEB Proposed Conditions", dated 9 March 2010, has indicated that this recommendation is outside the scope of the Mackenzie Gas Project applications as it involves future application(s).

The Government of Canada notes that future regulatory decisions of the National Energy Board regarding future applications should not be fettered.

Recommendation 15-11

The Panel recommends that the governments of Canada and the Northwest Territories and the Aboriginal Summit continue negotiations towards settlement of a NWT-based resource revenue sharing agreement on a priority basis, and that such an agreement be finalized in advance of the National Energy Board granting the Proponents Leave to Open. If an agreement is not concluded by that time, the Panel recommends that the Government of Canada set aside 50% of the non renewable resource royalty revenues it receives from the Mackenzie Gas Project to be held in trust for the Government of the Northwest Territories and Aboriginal authorities until such time as a resource revenue sharing agreement has been concluded among the three parties.

Response

The Governments of Canada and the Northwest Territories note that this recommendation is outside the scope of the Joint Review Panel's mandate and therefore the Governments do not accept this recommendation. The "Agreement for the Environmental Impact Review of the Mackenzie Gas Project", which came into effect on August 3, 2004, sets out the specific and detailed mandate for the Joint Review Panel's environmental impact review. This recommendation goes beyond the mandate because it deals with an "NWT-based resource revenue sharing agreement" which includes non-renewable resources beyond the Mackenzie Gas Project.

The Governments of Canada and the Northwest Territories and Aboriginal groups continue to advance negotiations toward the devolution of federal authority over land and resources management. While devolution is a Government of Canada goal, it is not directly linked to the advancement of the Mackenzie Gas Project. The 16th Legislative Assembly of the Government of the Northwest Territories has identified achieving significant progress toward northern control over the administration of lands, the regulatory system and resources revenue sharing as a priority.

Recommendation 15-12

The Panel recommends that, immediately following the Proponents' Decision to Construct, the Government of the Northwest Territories begin establishing mechanisms for transition planning and implementation associated with the Mackenzie Gas Project in combination with future developments to accomplish the following purposes:

- *set long-term economic diversification objectives to ensure lasting benefits from the Mackenzie Gas Project with related indicators and targets;*
- *develop and assess alternative future scenarios and adjust objectives in light of the findings;*
- *determine immediate and longer-term priorities;*
- *plan initiatives in partnership with other governments, regional Aboriginal authorities and other partners; and*
- *monitor, respond and review*

Response

The Government of the Northwest Territories notes that this recommendation is outside the

scope of the Joint Review Panel's mandate and therefore the Government does not accept this recommendation. The "Agreement for the Environmental Impact Review of the Mackenzie Gas Project", which came into effect on August 3, 2004, sets out the specific and detailed mandate for the Joint Review Panel's environmental impact review. This recommendation goes beyond the mandate because it fetters the Northwest Territories Legislature's broader governance function.

The Government of the Northwest Territories supports a balanced approach to the development of all sectors of the territorial economy in a way that is sustainable over time and strives to diversify the economy and infrastructure.

The 16th Legislative Assembly has established strategic planning, business planning and program review processes within the Government that will achieve the outcomes identified in this recommendation. The elements of this recommendation will help guide the development of Government activities.

The Government of the Northwest Territories continues to develop and implement strategies to ensure the long-term viability of the Northwest Territories' economy. The Government established a strategic planning function within the Department of Executive in 2007 to coordinate longer term planning across government departments. The Government continues to work with Aboriginal groups, local governments and businesses to ensure a sustainable future for present and future generations of Northwest Territories' residents, including ways to enhance regional and local capacity, community resilience, and economic self-reliance and diversity in the Northwest Territories. The Government of the Northwest Territories remains committed to working with its residents to develop a sustainable society.

Recommendation 15-13

The Panel recommends that, within 10 years of the National Energy Board granting the Proponents Leave to Open, the Government of the Northwest Territories identify and allocate a specific portion of its share of non-renewable resource royalty revenues to the funding of the mechanisms established pursuant to Panel Recommendation 15-12.

Response

The Government of the Northwest Territories notes that this recommendation is outside the scope of the Joint Review Panel's mandate and therefore the Government does not accept this recommendation. The "Agreement for the Environmental Impact Review of the Mackenzie Gas Project", which came into effect on August 3, 2004, sets out the specific and detailed mandate for the Joint Review Panel's environmental impact review. This recommendation goes beyond the mandate because it fetters the Northwest Territories Legislature's broader governance function.

The Government of the Northwest Territories is of the view that an important element of completing a devolution and resource revenue sharing agreement is ensuring capacity to invest in economic infrastructure and other initiatives that would support the objectives related to Panel Recommendation 15-12.

Recommendation 16-1

The Panel recommends that the National Energy Board, as a condition of any certificate or approvals it might issue in relation to the Mackenzie Gas Project, require the Proponents to implement closed work camps. This requirement should apply to all new work camps proposed by the Proponents, their contractors and subcontractors.

Response

This recommendation was directed to the National Energy Board.

The National Energy Board has addressed this recommendation within its Proposed Conditions dated 9 March, 2010.

Recommendation 16-2

The Panel recommends that the National Energy Board, as a condition of any certificate or approvals it might issue in relation to the Mackenzie Gas Project, require the Proponents to identify whether any of the existing open construction camps will be used, either directly or indirectly, in relation to Project construction. Where existing open camps are to be used and are to remain open, the Panel further recommends that the National Energy Board, as a condition of any certificate or approvals it might issue in relation to the Mackenzie Gas Project, require the Proponents to develop a plan to minimize and address adverse impacts of any interactions between workers in the open camps and the communities in proximity to those camps. The plan should comply with the commitments made by the Proponents, identify the specific measures to be employed and be developed in consultation with, and to the satisfaction of, the affected communities. The final plan should be filed with the National Energy Board at least six months prior to the commencement of construction.

Response

This recommendation was directed to the National Energy Board.

The National Energy Board has addressed this recommendation within its Proposed Conditions dated 9 March, 2010.

Recommendation 16-3

The Panel recommends that the National Energy Board, as a condition of any certificate or approvals it might issue in relation to the Mackenzie Gas Project, require the Proponents to file, at least six months prior to the commencement of construction, a plan to monitor the interactions between construction workers and the communities of Fort Good Hope and Tulita and to identify the specific actions to be taken should the monitoring identify unanticipated adverse interactions. The plan should be developed in consultation with the leadership of Fort Good Hope and Tulita and provide for regular consultation with and follow-up reporting back to the leadership of both potentially affected local communities.

Response

This recommendation was directed to the National Energy Board.

The National Energy Board has addressed this recommendation within its Proposed Conditions dated 9 March, 2010.

Recommendation 16-4

The Panel recommends that the National Energy Board, as a condition of any certificate or approvals it might issue in relation to the Mackenzie Gas Project, require the Proponents to file, prior to the commencement of construction, a program to monitor noise emissions in relation to the Mackenzie Gas Project and to confirm that the Project is meeting the noise levels to which the compressor stations will be designed.

Response

This recommendation was directed to the National Energy Board.

The National Energy Board has addressed this recommendation within its Proposed Conditions dated 9 March, 2010.

Recommendation 16-5

The Panel recommends that the Government of the Northwest Territories and the Proponents, consistent with provision 3.6.2(b) of the Socio-Economic Agreement, and prior to the commencement of construction, further develop and make public their plan for preventing Project-related drug and alcohol abuse. The plan should incorporate input from the Royal Canadian Mounted Police, responsible agencies and affected communities in the Project Review Area regarding the measures proposed by the Proponents and any other preventive measures. The plan should also identify government resources (human and financial) required to implement the plan and include the Government of the Northwest Territories' plans for applying those resources.

Response

The Governments of Canada and the Northwest Territories accept the intent of this recommendation.

The Government of the Northwest Territories supports a variety of alcohol and drug prevention activities, supports community wellness activities, offers treatment programs and supports aftercare programs. The Government will prepare a plan that describes current approaches, identifies additional activities that could be undertaken to prevent alcohol and drug abuse, and identifies approaches to monitor Project-related demand for alcohol and drug-related programs. The Royal Canadian Mounted Police will provide input to the preparation of the plan.

If additional alcohol and drug-related programs are needed to mitigate the socio-economic impact of the Mackenzie Gas Project, the Governments of Canada and the Northwest Territories expect that the Regional Organizations would seek funding from the Corporation for the

Mitigation of Mackenzie Gas Project Impacts (Corporation) as established pursuant to the *Mackenzie Gas Project Impacts Act* for the additional programs. The Government of the Northwest Territories will work with the Regional Organizations to co-ordinate the delivery and/or implementation of additional alcohol and drug-related programs funded through the Corporation, as long as they are aligned with existing Government programs to minimize the duplication of services. Further, the Government will not provide any additional Mackenzie Gas Project specific program funds unless new funds are available from other sources.

Recommendation 16-6

The Panel recommends that the Proponents, prior to the commencement of construction and as part of the plan required by Panel Recommendation 16-5, outline the means by which they will apply their drug and alcohol policies to Mackenzie Gas Project contractors and subcontractors. This should include a description of the mechanisms by which the Proponents will enforce compliance and the consequences of non-compliance.

Response

The Governments of Canada and the Northwest Territories accept this recommendation.

The Governments agree that the Proponents' drug and alcohol policies must apply equally to employees, contractors and sub-contractors. The Proponents committed in the Mackenzie Gas Project Socio-Economic Agreement (MGP SEA) to implement and enforce policies and practices to ensure all worksites are alcohol and drug free (MGP SEA section 3.2.1) and, furthermore, contractors and sub-contractors will be required to comply with these same obligations (MGP SEA section 7.1.2). The mechanisms for enforcing compliance at the contractor and sub-contractor levels and the consequences of non-compliance must be clear and well-understood by all parties.

Implementation of this recommendation is the responsibility of the Proponents.

Recommendation 16-7

The Panel recommends that the Government of the Northwest Territories, within six months of the Proponents' Decision to Construct, and consistent with provision 3.7.2(c) of the Socio-Economic Agreement, file with the Northwest Territories Oil and Gas Socio-Economic Advisory Board a submission that identifies alcohol and drug abuse prevention programs in place for communities in the Project Review Area, an assessment of whether these programs are adequate, and a plan to secure sufficient capacity to accommodate both existing treatment needs for alcohol and drug abuse and the increased demand that would be related to the Mackenzie Gas Project. The programs could include reopening of, and support for, existing treatment centres in the Northwest Territories and the negotiation of arrangements with treatment centres outside the Northwest Territories.

Response

The Government of the Northwest Territories accepts the intent of this recommendation.

The Government supports a variety of alcohol and drug prevention activities, supports community wellness activities, offers treatment programs and supports aftercare programs. The Government will prepare a plan that describes current approaches, identifies additional activities that could be undertaken to prevent alcohol and drug abuse and identifies approaches to monitor Project-related demand for alcohol and drug-related programs.

If additional alcohol and drug-related programs are needed to mitigate the socio-economic impact of the Mackenzie Gas Project, the Governments of Canada and the Northwest Territories expect that the Regional Organizations would seek funding from the Corporation for the Mitigation of Mackenzie Gas Project Impacts (Corporation) as established pursuant to the *Mackenzie Gas Project Impacts Act* for the additional programs. The Government of the Northwest Territories will work with the Regional Organizations to co-ordinate the delivery and/or implementation of additional alcohol and drug-related programs funded through the Corporation, as long as they are aligned with existing Government programs to minimize the duplication of services. Further, the Government will not provide any additional Mackenzie Gas Project specific program funds unless new funds are available from other sources.

Recommendation 16-8

The Panel recommends that the Proponents and the Government of the Northwest Territories, prior to the commencement of construction and consistent with provision 3.6.3(b) of the Socio-Economic Agreement, reach an agreement whereby spaces for Mackenzie Gas Project employees who may need access to mental health, drug and alcohol treatment facilities under the Proponents' employee assistance program will be assured without reducing the level of service available to residents of the Northwest Territories.

Response

The Government of the Northwest Territories accepts the intent of this recommendation.

The Government notes that the Proponents are expected to negotiate with their employee assistance program providers, for the provision of mental health, drug and alcohol treatment services for their employees under the Mackenzie Gas Project Socio-Economic Agreement (MGP SEA) sub-arrangement "Health Services Agreement – Wellness Program". The Government anticipates that its current treatment mechanisms will meet the needs of residents of the Northwest Territories that request access to health and/or social services.

Recommendation 16-9

The Panel recommends that over the life of the Mackenzie Gas Project Impacts Fund the Government of the Northwest Territories coordinate the provision of its addiction and abuse treatment services and follow-up support with related projects, such as the Inuvialuit Regional Corporation's proposed regional addictions strategy and the Tulita District Land Corporation's healing and wellness centre, that are carried out by regional organizations under the Mackenzie Gas Project Impacts Fund.

Response

The Government of the Northwest Territories accepts the intent of this recommendation.

If additional addiction and abuse treatment programs are needed to mitigate the socio-economic impact of the Mackenzie Gas Project, the Governments of Canada and the Northwest Territories expect that the Regional Organizations would seek funding from the Corporation for the Mitigation of Mackenzie Gas Project Impacts (Corporation) as established pursuant to the *Mackenzie Gas Project Impacts Act* for the additional programs. The Government of the Northwest Territories will work with the Regional Organizations to co-ordinate the delivery and/or implementation of additional addiction and abuse treatment programs funded through the Corporation, as long as they are aligned with existing Government programs to minimize the duplication of services. Further, the Government will not provide any additional Mackenzie Gas Project specific program funds unless new funds are available from other sources.

Recommendation 16-10

The Panel recommends that the Proponents and the Government of the Northwest Territories, prior to the commencement of construction, work with communities, the Royal Canadian Mounted Police, bylaw officers, community social workers, alcohol and drug counsellors, individual and family counsellors, community health representatives, mental health workers, school counsellors and schools to provide addiction prevention and sexual education programs. The Panel further recommends that the Government of the Northwest Territories coordinate its programs with projects that are carried out by regional organizations under the Mackenzie Gas Project Impacts Fund.

Response

The Governments of Canada and the Northwest Territories accept the intent of this recommendation.

The Government of the Northwest Territories collaborates on numerous initiatives aimed at providing addiction prevention and sexual education programs to communities. The Government of the Northwest Territories recognizes that the commitments of the Proponents are limited to providing on-the-job resources, support and guidance to Project workers.

If additional addiction prevention and sexual education programs are needed to mitigate the socio-economic impact of the Mackenzie Gas Project, the Governments of Canada and the Northwest Territories expect that the Regional Organizations would seek funding from the Corporation for the Mitigation of Mackenzie Gas Project Impacts (Corporation) as established pursuant to the *Mackenzie Gas Project Impacts Act* for the additional programs. The Government of the Northwest Territories will work with the Regional Organizations to co-ordinate the delivery and/or implementation of the additional addiction prevention and sexual education programs funded through the Corporation, as long as they are aligned with existing Government programs to minimize the duplication of services. Further, the Government will not provide any additional Mackenzie Gas Project specific program funds unless new funds are available from other sources.

Recommendation 16-11

The Panel recommends that, within six months of the Proponents' Decision to Construct, the governments of Alberta and the Northwest Territories provide sufficient resources to enable the Royal Canadian Mounted Police, the Northwest Territories' Liquor Board and the Alberta Liquor Control Board to enforce the Northwest Territories Liquor Act and the Alberta Alcohol and Drug Abuse Act, respectively, during the construction phase and, in particular, to enforce those provisions related to the over-serving of alcohol and to preventive detention of intoxicated persons who may be a danger to themselves and others.

Response

The Governments of Canada and the Northwest Territories accept the intent of this recommendation.

The Governments note that the *Alberta Alcohol and Drug Abuse Act* is under the jurisdiction of the Province of Alberta.

The Government of the Northwest Territories provides resources to enforce the *Northwest Territories Liquor Act*.

Recommendation 16-12

The Panel recommends that, within six months of receipt of the plan referred to in Panel Recommendation 6-5, communities potentially impacted by the Mackenzie Gas Project review and adopt alcohol and drug control measures and make the necessary provisions to enforce those measures. These measures should be consistent with the plan provided in Panel Recommendation 16-5 and with the projects being carried out by regional organizations under the Mackenzie Gas Project Impacts Fund.

Response

The Governments of Canada and the Northwest Territories accept the intent of this recommendation.

The Governments do not have the legal means to compel communities to review and adopt alcohol and drug control measures.

The Governments, in collaboration with the Royal Canadian Mounted Police (RCMP), have the authority to enforce measures under the *Northwest Territories Liquor Act* and the *Criminal Code of Canada*. Communities may review and adopt additional alcohol and drug control measures where appropriate.

The Government of the Northwest Territories is prepared to assist communities in identifying options for appropriate alcohol and drug control measures. The RCMP will work in concert with the Government of the Northwest Territories in the areas of alcohol and drug education, such as, the NWT Drug Strategy Program and the Drug and Alcohol Resistance Education Program which are active in most Northwest Territories communities.

If additional alcohol and drug-related programs are needed to mitigate the socio-economic impact of the Mackenzie Gas Project, the Governments expect that the Regional Organizations would seek funding from the Corporation for the Mitigation of Mackenzie Gas Project Impacts (Corporation) as established pursuant to the *Mackenzie Gas Project Impacts Act* for the additional programs. The Government of the Northwest Territories will work with the Regional Organizations to co-ordinate the delivery and/or implementation of additional alcohol and drug-related programs funded through the Corporation, as long as they are aligned with existing Government programs to minimize the duplication of services. Further, the Government will not provide any additional Mackenzie Gas Project specific program funds unless new funds are available from other sources.

Recommendation 16-13

The Panel recommends that the Government of the Northwest Territories, in consultation with the Proponents, community governments and Aboriginal organizations, within six months of the Proponents' Decision to Construct, prepare a coordinated health care plan that demonstrates that adequate and appropriate health and social services would be in place and available to meet both existing and increased demands in the communities that would be affected by the Mackenzie Gas Project. The plan should indicate for each community affected by the Mackenzie Gas Project:

- *the current and planned resource allocations by position, including but not limited to physicians, nurses, community social workers, individual and family counsellors, Community Health Representatives, mental health workers and drug and alcohol counsellors;*
- *the strategy to be employed to staff both current vacant positions and any new positions to be created to respond to Project demands;*
- *the contingency plans for addressing shortfalls in staffing;*
- *monitoring requirements to ensure resource alignment with service demands; and*
- *progress reporting/communication plans.*

The plan should be made public and shared with the regions and communities affected by the Mackenzie Gas Project.

Response

The Government of the Northwest Territories does not accept this recommendation.

The Government notes that the recommendation is inconsistent with the Territorial Integrated Service Delivery Model. In addition, under the Mackenzie Gas Project Socio-Economic Agreement, a Medical Services Sub-agreement is under negotiation to ensure that community health services are not negatively impacted.

Planning for the delivery of health care in the NWT is based on the provision of appropriate access to safe, quality patient focused care. This system planning takes into consideration projected increases in demand related to emerging issues such as: an aging population, increased

prevalence of chronic disease, changes in health status, as well as increases in economic development. Our service delivery model and planning is structured in a way that maximizes our existing health care professionals and factors in advances in technology. As the NWT health and social services system functions as an integrated territorial system, the development of a specific coordinated health care plan related solely to one project would not be in the best interests of the NWT population as a whole.

Recommendation 16-14

The Panel recommends that the Government of the Northwest Territories, over the life of the Mackenzie Gas Project Impacts Fund, coordinate its health care plan and the delivery of health and social services with the related projects and activities being carried out by regional organizations under the Mackenzie Gas Project Impacts Fund.

Response

The Government of the Northwest Territories accepts this recommendation.

The Government of the Northwest Territories will work with the Regional Organizations to coordinate the delivery and/or implementation of additional health and social services programs funded through the Corporation for the Mitigation of the Mackenzie Gas Project Impacts.

Recommendation 16-15

The Panel recommends that the governments of Canada and the Northwest Territories, within six months of the Proponents' Decision to Construct, ensure that the Royal Canadian Mounted Police has sufficient financial resources to implement its plan to address expected Project-related increases in demand for police and public security services. The Panel further recommends that those resources be provided in a manner that addresses existing community demands for police services and does not reduce the levels of police and public security services provided in the other communities in the Northwest Territories.

Response

The Governments of Canada and the Northwest Territories accept the intent of this recommendation.

The Government of the Northwest Territories has a twenty-year contract with the Government of Canada regarding provision of policing services by the Royal Canadian Mounted Police (RCMP) and works closely with the RCMP "G" Division on an ongoing basis to identify appropriate resources and services required. The contract has specific provisions relating to standards of policing services and a process for adjusting resources including the number and location of detachments. The Government of the Northwest Territories will work with the RCMP "G" Division to ensure project related demands for policing services are responded to in a manner that does not impact existing services in communities in the Northwest Territories.

Recommendation 16-16

The Panel recommends that the Government of the Northwest Territories, the Proponents and the Royal Canadian Mounted Police, pursuant to provision 3.5.3 of the Socio-Economic Agreement, and in consultation with the leadership of the communities potentially affected by the Mackenzie Gas Project, ensure that coordination of police and public safety services be done in a manner that avoids the reduction of these services in the communities.

Response

The Governments of Canada and the Northwest Territories accept the intent of this recommendation.

The Government of the Northwest Territories Department of Justice and the Proponents signed a *Safety and Security Memorandum of Understanding* in January 2008 to address the coordination of policing and public safety services.

Recommendation 16-17

The Panel recommends that the Government of the Northwest Territories, the Royal Canadian Mounted Police and the affected communities, within six months of the date of the Government Response to the Panel's Report, determine whether the special constable program can play a public safety service role to help address Project-related impacts on the communities. Where it is determined that the special constable program can play an effective role, the Panel further recommends that the Government of the Northwest Territories, the Royal Canadian Mounted Police and the affected communities take the steps necessary to reinstate the program prior to the commencement of construction.

Response

The Governments of Canada and the Northwest Territories accept the intent of this recommendation.

For clarity, the Governments note that the program is titled the "Community Officer Program Pilot".

The Governments and the Royal Canadian Mounted Police are discussing the timing and implementation of this pilot program. Communities in the Northwest Territories are consulted as part of the planning process. The Government of the Northwest Territories will work with the Government of Canada and the Royal Canadian Mounted Police to explore viable options for policing services for communities in the Northwest Territories impacted by the Mackenzie Gas Project.

Recommendation 16-18

The Panel recommends that the Government of the Northwest Territories, within six months of the Proponents' Decision to Construct, as part of its Project-related program review:

- *identify the community-specific demands the Mackenzie Gas Project would place on child care services based on information supplied by the Proponents and by communities;*

- *identify the actions necessary to respond to those Project-related demands, including considerations such as rotational work, seasonal work, weekend care and day homes;*
- *develop and fund a program to implement the actions required to respond to the identified Project-related demand for child care services;*
- *coordinate its programs with projects to address Project-related demands for child care services being carried out by regional organizations, under the Mackenzie Gas Project Impacts Fund and by other organizations; and*
- *to be consistent with the provisions of the Socio-Economic Agreement, develop and implement a plan for:*
 - *monitoring Project-related demand for child care services;*
 - *determining the adequacy of the measures implemented to respond to that demand; and*
 - *determining for actions necessary to address, in a timely manner, any inadequacies or unintended consequences.*

Response

The Government of the Northwest Territories accepts the intent of this recommendation.

If additional programs and services are needed to mitigate the socio-economic impact of the Mackenzie Gas Project, the Government of the Northwest Territories expects that the Regional Organizations would seek funding from the Corporation for the Mitigation of Mackenzie Gas Project Impacts (Corporation) as established pursuant to the *Mackenzie Gas Project Impacts Act* for the additional programs. The Government of the Northwest Territories will work with the Regional Organizations to co-ordinate the delivery and/or implementation of additional programs funded through the Corporation, as long as they are aligned with existing Government programs to minimize the duplication of services. Further, the Government will not provide any additional Mackenzie Gas Project specific program funds unless new funds are available from other sources.

Recommendation 16-19

The Panel recommends that the Government of the Northwest Territories, within six months of the Proponents' Decision to Construct, as part of its Project-related program review:

- *determine, for the regional centres that have been identified by the Proponents as being the likely destinations for both transient workers from the south and for residents from the smaller communities, the capacity of the existing homeless shelters;*
- *forecast the likely Project-related increase in demand for those existing shelter spaces;*
- *where forecasted demand exceeds existing capacity, address the need for additional shelter spaces; and*
- *develop and implement a plan for:*
 - *monitoring Project-related demand for shelter space;*
 - *determining the adequacy of the measures implemented to respond to that demand; and*
 - *determining the actions necessary to address, in a timely manner, any inadequacies or unintended consequences, consistent with the requirements of the Socio-Economic Agreement.*

Response

The Government of the Northwest Territories accepts the intent of this recommendation.

If additional programs and services are needed to mitigate the socio-economic impact of the Mackenzie Gas Project, the Government of the Northwest Territories expects that the Regional Organizations would seek funding from the Corporation for the Mitigation of Mackenzie Gas Project Impacts (Corporation) as established pursuant to the *Mackenzie Gas Project Impacts Act* for the additional programs. The Government of the Northwest Territories will work with the Regional Organizations to co-ordinate the delivery and/or implementation of additional programs funded through the Corporation, as long as they are aligned with existing Government programs to minimize the duplication of services. Further, the Government will not provide any additional Mackenzie Gas Project specific program funds unless new funds are available from other sources.

Recommendation 16-20

The Panel recommends that the Government of the Northwest Territories, within six months of the Proponents' Decision to Construct, as part of its Project-related program review:

- *determine, for each of the regions affected by the Mackenzie Gas Project, the capacity of the existing family and women's shelters and the services necessary to provide ongoing support to those who need sheltering, including the provision of counselling services;*
- *forecast the likely Project-related increase in demand for both shelters and ongoing support services;*
- *where predicted demand exceeds existing capacity, address the need for additional shelter spaces and ongoing support services;*
- *coordinate its programs with similar projects being carried out by regional organizations under the Mackenzie Gas Project Impacts Fund; and*
- *develop and implement a plan for:*
 - *monitoring Project-related demands on family and women's shelters and related services and the capacity to meet those demands;*
 - *determining the adequacy of the measures implemented to respond to those demands; and*
 - *determining the actions necessary to address, in a timely manner, any inadequacies or unintended consequences, consistent with the requirements of the Socio-Economic Agreement.*

Response

The Government of the Northwest Territories accepts the intent of this recommendation.

The Government delivers and/or supports a range of services through the shelter network, including victims' services and family violence services and supports from the Department of Health and Social Services and the Department of Justice. The Departments will carry out monitoring commitments under the Mackenzie Gas Project Socio-Economic Agreement regarding the net effects on government, including use of social services. The Government will identify and develop approaches that could be employed to mitigate Project-related demands for

family and women's shelters and related services.

If additional victims' services and family violence services programs are needed to mitigate the socio-economic impact of the Mackenzie Gas Project, the Government expects that the Regional Organizations would seek funding from the Corporation for the Mitigation of Mackenzie Gas Project Impacts (Corporation) as established pursuant to the *Mackenzie Gas Project Impacts Act* for the additional programs. The Government will work with the Regional Organizations to coordinate the delivery and/or implementation of such additional programs funded through the Corporation, as long as they are aligned with existing Government programs to minimize the duplication of services. Further, the Government will not provide any additional Mackenzie Gas Project specific program funds unless new funds are available from other sources.

Recommendation 16-21

The Panel recommends that the Government of the Northwest Territories, within six months of the Proponents' Decision to Construct, as part of its Project-related program review:

- *determine the community-specific demands that the Mackenzie Gas Project would place on Elder care services, including the specific needs of those who may be working on the Project, such as those related to shift work, seasonal work and weekend care;*
- *identify the current range of community-specific Elder care services that are available to meet the predicted demand;*
- *where forecasted Project-related demand exceeds existing capacity, address the need for additional capacity and ongoing support services;*
- *coordinate its programs with similar projects being carried out by regional organizations under the Mackenzie Gas Project Impacts Fund; and*
- *develop and implement a plan for:*
 - *monitoring Project-related demands on Elder care services and the capacity to meet those demands;*
 - *determining the adequacy of the measures implemented to respond to those Elder care demands; and*
 - *determining the actions necessary to address, in a timely manner, any inadequacies or unintended consequences, consistent with the requirements of the Socio-Economic Agreement.*

Response

The Government of the Northwest Territories accepts the intent of this recommendation.

The Government delivers and/or supports a range of services through the Department of Health and Social Services that would include elder care services. The Department will carry out monitoring commitments under the Mackenzie Gas Project Socio-Economic Agreement regarding net effects on government, including use of social services.

If additional elder care services programs are needed to mitigate the socio-economic impact of the Mackenzie Gas Project, the Government expects that the Regional Organizations would seek funding from the Corporation for the Mitigation of Mackenzie Gas Project Impacts (Corporation) as established pursuant to the *Mackenzie Gas Project Impacts Act* for the

additional programs. The Government will work with the Regional Organizations to co-ordinate the delivery and/or implementation of additional elder care programs funded through the Corporation, as long as they are aligned with existing Government programs to minimize the duplication of services. Further, the Government will not provide any additional Mackenzie Gas Project specific program funds unless new funds are available from other sources.

Recommendation 16-22

The Panel recommends that the Government of the Northwest Territories, in cooperation with the Proponents and communities, within six months of the Proponents' Decision to Construct:

- *determine community-specific needs for suicide prevention programs, awareness programs and health care workers and address those needs with specific programs;*
- *coordinate its programs with similar projects being carried out by regional organizations under the Mackenzie Gas Project Impacts Fund; and*
- *develop and implement a plan for:*
 - *monitoring Project-related needs for those suicide prevention and awareness programs and counsellors;*
 - *determining the adequacy of the measures implemented to respond to those needs; and*
 - *determining the actions necessary to address, in a timely manner, any inadequacies or unintended consequences, consistent with the requirements of the Socio-Economic Agreement.*

Response

The Government of the Northwest Territories accepts the intent of this recommendation.

The Government currently provides a variety of mental health programs and will identify and develop approaches that could be employed to mitigate Project-related demands for suicide prevention programs.

If additional mental health programs are needed to mitigate the socio-economic impact of the Mackenzie Gas Project, the Government expects that the Regional Organizations would seek funding from the Corporation for the Mitigation of Mackenzie Gas Project Impacts (Corporation) as established pursuant to the *Mackenzie Gas Project Impacts Act* for the additional programs. The Government will work with the Regional Organizations to co-ordinate the delivery and/or implementation of additional mental health programs funded through the Corporation, as long as they are aligned with existing Government programs to minimize the duplication of services. Further, the Government will not provide any additional Mackenzie Gas Project specific program funds unless new funds are available from other sources.

Recommendation 16-23

The Panel recommends that the National Energy Board, as a condition of any certificate or approvals it might issue in relation to the Mackenzie Gas Project or the Northwest Alberta Facilities, require the Proponents or NOVA Gas Transmission Ltd., as appropriate, to file, no later than six months prior to the commencement of construction or as otherwise directed by the

National Energy Board, their plans for a formal issue resolution program that would be implemented during construction and operations. The program should be prepared in consultation with the governments of the Northwest Territories and Alberta, and Aboriginal authorities, and should include the following:

- *a description of the process by which any complaints or issues related to the Mackenzie Gas Project would be raised with the Proponents or governments;*
- *a description of the process by which any received complaints or issues would be allocated among those with responsibility for action and a description of the roles and responsibilities of any party involved in assessing or responding to any complaint or issue;*
- *a description of the process by which any received complaints or issues would be resolved;*
- *a description of any protocols developed for referral and resolution of any complaints or issues;*
- *a description of the recourse mechanisms for any unresolved complaints or issues or any unsatisfactorily resolved complaints or issues; and*
- *a description of the process for communicating and informing communities about the complaint resolution program.*

Response

This recommendation was directed to the National Energy Board.

The National Energy Board, within its “Concordance Table for Joint Review Panel recommendations and NEB Proposed Conditions”, dated 9 March 2010, has indicated that this recommendation has been addressed within its Proposed Conditions with the exception of those portions that relate to future applications.

The Government of Canada notes that this recommendation refers to a future application and acknowledges that the discretion of future regulatory decisions should not be fettered. Should an application for the Northwest Alberta facilities be filed, the appropriate regulatory bodies will evaluate and consider what mitigation measures are appropriate having regard, among other things, to the Environmental Impact Review for the Mackenzie Gas Project.

Recommendation 16-24

The Panel recommends that the Corporation for the Mitigation of Mackenzie Gas Project Impacts, in consultation with the governments of Canada and the Northwest Territories, determine the priority projects that need to be completed and in place in advance of the commencement of construction. The Panel further recommends that the Minister of Indian Affairs and Northern Development consider recommending that adequate funds be requisitioned to develop and implement those priority projects sufficiently in advance of the commencement of construction and that the Government of Canada advance the requested funds as soon as practical thereafter.

Response

The Government of Canada accepts the intent of this recommendation.

The Government has provided funding to potentially-impacted Aboriginal organizations living along the Northwest Territories portion of the proposed pipeline corridor to undertake mitigation planning in preparation for the construction and operation of the Mackenzie Gas Project.

For clarity, the Government notes that the Corporation for the Mitigation of Mackenzie Gas Project Impacts (the Corporation) was established pursuant to the *Mackenzie Gas Project Impacts Act* (MGPIA). The purpose of the Corporation is to provide contributions to Regional Organizations for projects that mitigate socio-economic impacts arising from the Mackenzie Gas Project and is consistent with criteria established and made publicly available by the Corporation.

The decision regarding the advancement of funds to the Corporation will be upon the recommendation of the Minister responsible for the MGPIA with the approval of the Minister of Finance. As well, the Minister responsible for the MGPIA may only recommend that funds be advanced to the Corporation if the Mackenzie Gas Project has not been terminated and the Minister is of the opinion that progress is being made on the Mackenzie Gas Project.

Recommendation 16-25

The Panel recommends that projects funded through the Mackenzie Gas Project Impacts Fund be included in the monitoring and follow-up programs referred to in Panel recommendations 18-1 and 18-2.

Response

The Governments of Canada and the Northwest Territories accept the intent of this recommendation.

The Governments will work with the Corporation for the Mitigation of Mackenzie Gas Project Impacts to identify project-related information that could be included in the monitoring and follow-up programs referred to in the Governments' Response to recommendations 18-1 and 18-2.

Recommendation 16-26

The Panel recommends that the Corporation for the Mitigation of Mackenzie Gas Project Impacts, in establishing its criteria as required by section 5. (2)(b) of the Mackenzie Gas Project Impacts Act, include provisions that would enable the regional organizations to set aside funds to address unanticipated and unforeseen issues as well as funds to extend some programs beyond the expiration of the Mackenzie Gas Project Impacts Fund.

Response

The Government of Canada does not accept this recommendation.

The Corporation for the Mitigation of Mackenzie Gas Project Impacts (the Corporation) may

only provide contributions to Regional Organizations in respect of a project if the project: mitigates the existing or anticipated socio-economic impacts on communities in the Northwest Territories arising from the Mackenzie Gas Project; and, is consistent with criteria established and made publicly available by the Corporation.

Recommendation 17-1

The Panel recommends that the National Energy Board take the steps necessary to extend application of the principles underlying its RH-2-2008 decision, and any other relevant elements of the Board's Land Matters Consultation Initiative, to all components of the Mackenzie Gas Project and the Northwest Alberta Facilities.

Response

This recommendation was directed to the National Energy Board.

The National Energy Board has addressed this recommendation within its Proposed Conditions for the Mackenzie Gathering System dated 9 March 2010.

The Government of Canada notes that this recommendation refers to a future application and acknowledges that the discretion of future regulatory decisions should not be fettered. Should an application for the Northwest Alberta facilities be filed, the appropriate regulatory bodies will evaluate and consider what mitigation measures are appropriate having regard, among other things, to the Environmental Impact Review for the Mackenzie Gas Project.

The National Energy Board RH-2-2008 decision and other parts of the Land Matters Consultation Initiative relates to activities covered under the *National Energy Board Act*. Only parts of the Mackenzie Gas Project (i.e. the pipeline and related facilities) operate under this Act. The other components of the Project (i.e. the anchor fields) operate under the *Canada Oil and Gas Operations Act* where RH-2-2008 and the Land Matters Consultation Initiative do not apply. The application of RH-2-2008 and any other relevant elements of the Land Matters Consultation Initiative to other components of the project are at the discretion of the National Energy Board.

Recommendation 17-2

The Panel recommends that Indian and Northern Affairs Canada, the National Energy Board, the Northwest Territories Water Board and the relevant land and water boards of the Mackenzie Valley convene a meeting within six months of the date of the Proponents' Decision to Construct to establish a coordinated approach, within the mandate of each agency, for:

(a) the development and submission of decommissioning and abandonment plans by the Proponents, including:

- the timing for submission of conceptual plans;*
- procedures and timing for developing final plans; and*
- a description of the Project facilities and activities to which the plans apply; and*

(b) establishing the form and amount of financial security the Proponents will be required to submit for decommissioning and abandonment, including:

- *the timing and procedure for obtaining estimates of funds needed for abandonment;*
- *the mechanism and timing for the collection and setting aside of those funds; and*
- *identification of the facilities to which the security applies.*

Response

The Government of Canada accepts the intent of this recommendation.

This recommendation was also directed to the National Energy Board.

The National Energy Board, within its “Concordance Table for Joint Review Panel Recommendations and NEB Proposed Conditions”, dated 9 March 2010, has indicated that it has addressed those portions of this recommendation under its jurisdiction in its Proposed Conditions. The National Energy Board will continue to work collaboratively with northern agencies to develop a coordinated and effective approach.

The Governments are in agreement with the need to develop conceptual decommissioning and abandonment plans prior to construction, which will be incrementally updated with additional detail as the Project proceeds. The recommendation will need to include the Government of the Northwest Territories as a regulator in addition to those noted, in order to implement a coordinated approach on territorial (Commissioners) lands and Federal Crown lands.

Indian and Northern Affairs Canada (as Crown land manager) is not in agreement with the timing of the recommendation which is understood to be within six months of the Proponents Decision to Construct. These conceptual plans for abandonment and decommissioning are a typical component of land tenure and other regulatory authorisations which will need to be in place (and agreed-to by Proponents) in advance of a Decision to Construct. The establishment of appropriate financial securities from the Proponents is a major component of these plans which will need advance discussion and negotiation.

The coordinated approach called for in the recommendation would require more discussion with the Government of the Northwest Territories to confirm land management approaches.

Preamble to chapter 18 recommendations

Monitoring and mitigation are requirements of environmental and regulatory legislation. A follow up program is a requirement of the *Canadian Environmental Assessment Act* legislation/guidance and is allowed for under the *Mackenzie Valley Resource Management Act* (MVRMA). Governments provided evidence to the Joint Review Panel which included broad support for the Northwest Territories environmental management framework (particularly the NWT Cumulative Impact Monitoring Program) and for a coordinated process amongst government agencies and regulators for the analysis and interpretation of monitoring data as supplied by the Proponents.

In the Panel’s view, “the foundation already exists in the MVRMA to manage, on a comprehensive and integrated basis, the land and water of the Mackenzie Valley”, with the NWT Cumulative Impact Monitoring Program and its linkages to other programs being a key

component of this foundation.

In this context, the Governments agree with the intent of the Joint Review Panel on the need to fully implement the principles and mandate of the NWT Cumulative Impact Monitoring Program (18-12, 18-15, 18-16, 18-17), and to establish strong linkages to the project-related monitoring, mitigation and follow-up requirements of the Mackenzie Gas Project (18-2, 18-3, 18-5, 18-10, 18-19, 18-22). There are additional monitoring initiatives in other recommendations within the Panel's report that are integral to the NWT Cumulative Impact Monitoring Program. Monitoring initiatives such as subsidence and flooding (6-10) and permafrost and terrain monitoring (6-11) would be part of the integrated monitoring program. Funding was announced in Budget 2010: Leading the Way on Jobs and Growth for Canada's broad-based responsibilities to implement the NWT Cumulative Impact Monitoring Program (including Government's responsibility towards cumulative effects management in the NWT). Work is underway to identify priorities for the Program at large. This work will be informed by the Joint Review Panel recommendations pertaining to monitoring.

Governments also confirmed their stated support for including Aboriginal groups and communities in monitoring and follow-up processes for the project (18-6). The scope and nature of this involvement would need to be defined with both Proponents and Government having responsibilities in this regard. Aboriginal groups have clearly identified that they expect to have a significant role in such decision making processes on the project.

The Governments are supportive of the dual roles assigned to Indian and Northern Affairs Canada by the Joint Review Panel. Indian and Northern Affairs Canada's current status as the 'lead Responsible Authority' under the NWT Cumulative Impact Monitoring Program will continue. Additionally, it will also assume responsibilities as a 'lead Responsible Authority' for project-related coordination and oversight for monitoring, mitigation and follow-up requirements of the Mackenzie Gas Project (18-1, 18-4, 18-12, 18-18, 18-20).

The Governments do not agree with the Joint Review Panel that it is necessary at this time, to implement a 'corporate entity' consisting of a Board in order to fully implement the NWT Cumulative Impact Monitoring Program. However, the Governments agree with the JRP that there is a need to establish an effective management structure with adequate administrative and technical support (18-13) for the NWT Cumulative Impact Monitoring Program.

The Government of the Northwest Territories has established State of the Environment reporting that will provide a mechanism for reporting on cumulative effects throughout the Northwest Territories (http://www.enr.gov.nt.ca/_live/pages/wpPages/SOE_Welcome.aspx).

It is important to clearly understand Government (especially Indian and Northern Affairs Canada) commitments in implementing these recommendations. Investment of both Governments would be necessary in order to develop the management structures and elements of a redefined NWT Cumulative Impact Monitoring Program in conjunction with Mackenzie Gas Project-specific needs and linkages. Terms of reference for involvement of Government, Aboriginal groups, Proponents and the public in both the NWT Cumulative Impact Monitoring Program and Mackenzie Gas Project-specific monitoring and follow-up, will need coordination

and communication oversight and attention.

Recommendation 18-1

The Panel recommends that there be a follow-up program to verify the accuracy of the environmental assessment and determine the effectiveness of the measures to mitigate the adverse environmental impacts for all phases of the Mackenzie Gas Project. The Panel recommends that the Department of Indian Affairs and Northern Development be designated as the lead Responsible Authority under the Canadian Environmental Assessment Act for overseeing the design and implementation of the follow-up program, and that the program be in place prior to the commencement of construction.

Response

The Governments of Canada and the Northwest Territories accept the intent of this recommendation.

Indian and Northern Affairs Canada, as a Responsible Authority under the *Canadian Environmental Assessment Act*, and the Federal Minister on behalf of the Responsible Ministers under the *Mackenzie Valley Resource Management Act*, will lead and oversee the design and implementation of the follow-up program for the biophysical environmental components of the Mackenzie Gas Project.

The Governments are committed to consult with affected Aboriginal groups and relevant stakeholders on the follow-up program.

The Government of the Northwest Territories negotiated the Mackenzie Gas Project Socio-Economic Agreement to design and implement a socio-economic follow-up program for the Project. This Agreement, signed in January 2007, includes several sub-agreements. The Northwest Territories Oil and Gas Advisory Board, when established, will engage the parties in oversight of the socio-economic effects follow-up.

The Government of Canada will also work with the Corporation for the Mitigation of Mackenzie Gas Project Impacts to identify project related information that could be included in the monitoring and follow-up programs.

Recommendation 18-2

The Panel recommends that the follow-up program for the Mackenzie Gas Project consist of, but not be limited to, the provisions for Project-specific impact monitoring, adaptive management and cumulative impacts monitoring set out in Panel Recommendations 18-3, 18-4, 18-5, 18-16, 18-18, 18-19, 18-20 and 18-22.

Response

The Governments of Canada and the Northwest Territories accept the intent of this recommendation.

The Governments will ensure that the Mackenzie Gas Project follow-up program includes the appropriate provisions within recommendations 18-3, 18-4, 18-5, 18-16, 18-18, 18-19, 18-20 and 18-22 in keeping with the Governments' Response.

The Government of the Northwest Territories notes that some aspects of recommendations 18-3, 18-5 and 18-16 are not applicable to socio-economic valued components.

Recommendation 18-3

The Panel recommends that all Project-specific impact monitoring programs and related cumulative impact monitoring programs, whether conducted by the Proponents, governments, other agencies or in combination, include the following elements:

- *identification of monitoring objectives and means of achieving verifiable results capable of guiding remedial action;*
- *formulation of clearly stated research questions capable of testing impact predictions;*
- *key measurable indicators linking Mackenzie Gas Project activities to outcomes, and thresholds or reference levels to identify Project effects;*
- *strategies and protocols for data collection and quality control;*
- *a design that is compatible with and able to contribute to the Cumulative Impact Monitoring Program;*
- *protocols for data compilation, storage, control and access;*
- *provision for data analysis and assessment; and*
- *reporting procedures and schedules.*

Response

The Governments of Canada and the Northwest Territories accept the intent of this recommendation.

The Governments will work with other responsible parties to implement the recommendation to the extent of their authorities. The Governments note that socio-economic thresholds cannot always conclusively identify project effects because socio-economic conditions are complex and affected by many external factors. However, the Government of the Northwest Territories and the Proponents defined a follow-up program for socio-economic indicators in section 8 of the Mackenzie Gas Project Socio-Economic Agreement. The Government is committed to identify key measurable socio-economic indicators that can be linked to Project activities and are most likely to identify trends.

Recommendation 18-4

The Panel recommends that the Department of Indian Affairs and Northern Development, as the lead Responsible Authority responsible for the Mackenzie Gas Project follow-up program, require the Proponents to provide monitoring data collected in their environmental monitoring program, as appropriate, to and in a form acceptable to the following recipients: downstream regulators, government agencies, Land Use Planning bodies, the Northwest Territories Oil and Gas Socio-Economic Advisory Board, the Corporation for the Mitigation of Mackenzie Gas Project Impacts and the Cumulative Impact Monitoring Program.

Response

The Governments of Canada and the Northwest Territories accept the intent of this recommendation.

The Governments do not have the authority to compel the Proponents to provide monitoring data in all instances, however, the Proponents have committed to providing their results. The Governments will work with the Proponents to implement the recommendation.

Recommendation 18-5

The Panel recommends that adaptive management for Project-specific or cumulative impacts, whether conducted by the Proponents, governments, other agencies or in combination, include the following components:

- *provision for regular review of adaptive management effectiveness, adjustment of related monitoring and responses to focus on significant continuing concerns;*
- *collaboration with participants in related assessment, planning and adaptive management work, especially where cumulative impacts may be involved;*
- *sharing of findings among participants in monitoring and among stakeholders and others involved in selecting, designing and applying adaptive responses;*
- *a transparent process for setting and adjusting monitoring and management priorities;*
- *implementation and contingency plans and resources to enable responsive action especially in areas where effect predictions are thought to be uncertain and where predictive errors may have serious consequences; and*
- *clearly defined impacts thresholds, where possible, to clarify where and when adaptive responses will be necessary.*

The Panel recommends that the design of adaptive management approaches pay particular attention to the valued components identified as priorities through the scenario-based cumulative impacts assessment exercise.

Response

The Governments of Canada and the Northwest Territories accept the intent of this recommendation.

While the Government of the Northwest Territories will consider the elements of this recommendation in its future activities, it notes that some elements, in particular a requirement to define impact thresholds for socio-economic indicators, may not be possible.

Recommendation 18-6

The Panel recommends that the governments of Canada and the Northwest Territories commit long-term dedicated funding, for a period no less than the duration of the Mackenzie Gas Project, to departments, regulatory agencies and Aboriginal authorities to enable implementation of compliance and impact monitoring and follow-up programs for the duration of the Mackenzie Gas Project.

Response

The Governments of Canada and the Northwest Territories accept the intent of this recommendation.

The Governments support the provision of adequate and appropriate funding for the implementation of compliance and impact monitoring and follow-up programs for a period no less than the duration of the Mackenzie Gas Project.

Recommendation 18-7

The Panel recommends that, prior to the commencement of construction, the National Energy Board establish an office in the Northwest Territories to serve as the centre for the National Energy Board's inspection and monitoring activities with respect to the Mackenzie Gas Project.

Response

This recommendation was directed to the National Energy Board.

The National Energy Board, within its “Concordance Table for JRP Recommendations and NEB Proposed Conditions”, dated 9 March 2010, has indicated that this is an operational matter that it will consider should the applications be approved and the Proponents decide to proceed.

Recommendation 18-8

The Panel recommends that the National Energy Board publish reports on its inspection and monitoring activities with respect to the Mackenzie Gas Project, twice yearly during the construction of the Project and annually thereafter. Such reports should be made available in the regional centres in the Northwest Territories and in the communities directly affected by the Mackenzie Gas Project.

Response

This recommendation was directed to the National Energy Board.

The National Energy Board, within its “Concordance Table for JRP Recommendations and NEB Proposed Conditions”, dated 9 March 2010, has indicated that it will continue to work collaboratively with northern agencies to develop a coordinated and effective approach regarding compliance and inspection activities for the Project.

Recommendation 18-9

The Panel recommends that the National Energy Board, as a condition of any certificate or approvals it might issue in relation to the Mackenzie Gas Project, require the Proponents and, where applicable, each of the Project Proponents, to file a complete complement of detailed and comprehensive plans within its environmental management system including the Proponents' plans for:

- *environmental management;*

- *environmental protection;*
- *contingency and emergency response; and*
- *environmental compliance and effects monitoring.*

Each plan should describe how it is compatible with the comparable plan of each of the other Proponents, especially where there is the potential for overlapping Project-related impacts, and identify linkages and connections between it and the comparable monitoring and management plans of the other Proponents.

Response

This recommendation was directed to the National Energy Board.

The National Energy Board, within its “Concordance Table for JRP Recommendations and NEB Proposed Conditions”, dated 9 March 2010, has indicated that this recommendation is addressed through prevailing statutes and regulations.

Recommendation 18-10

The Panel recommends that the National Energy Board, downstream regulators and other bodies with monitoring responsibilities for the Mackenzie Gas Project continue to develop a coordinated approach to compliance monitoring among themselves and in cooperation with the Proponents, and that the National Energy Board lead the development of a protocol among the various agencies and other bodies to implement this approach.

Response

This recommendation was directed to the National Energy Board.

The National Energy Board, within its “Concordance Table for JRP Recommendations and NEB Proposed Conditions”, dated 9 March 2010, has indicated that it will continue to work collaboratively with northern agencies to develop a coordinated and effective approach regarding compliance and inspection activities for the Mackenzie Gas Project.

The Governments of Canada and the Northwest Territories are committed to working with the National Energy Board to help implement the recommendation. Federal and territorial departments will continue to engage in the compliance monitoring and regulatory planning for the Mackenzie Gas Project.

Recommendation 18-11

The Panel recommends that the National Energy Board, as a condition of any certificate or approvals it might issue in relation to the Mackenzie Gas Project, require the Proponents to file, prior to the commencement of construction, information related to the hiring of local residents as monitors to carry out compliance and environmental impact monitoring for the Mackenzie Gas Project including:

- *the nature of the activities to be monitored;*
- *clearly defined job descriptions for the positions as monitors;*

- *identification of the training that will be offered to monitors to enable them to perform their duties; and*
- *confirmation that monitors have been hired.*

Response

This recommendation was directed to the National Energy Board.

The National Energy Board has addressed this recommendation within its Proposed Conditions dated 9 March 2010.

In addition, the *Canada Oil and Gas Operations Act* Benefit Plans commit the Proponents to specify employment strategies and hiring principles that will assure local residents are provided first consideration for the training and employment as local monitors. The Proponents will report regularly on these commitments.

Recommendation 18-12

The Panel recommends that, within six months of the date of the Government Response to the Panel's Report, the Minister of Indian Affairs and Northern Development take the steps necessary to complete the establishment of the Cumulative Impact Monitoring Program and appoint a Responsible Authority as required under the Mackenzie Valley Resource Management Act.

Response

The Government of Canada accepts the intent of this recommendation.

The Government notes that the recommended timeframe is inadequate to establish the necessary management and organizational elements to complete the NWT Cumulative Impact Monitoring Program. The Government notes that the participation of affected Aboriginal groups and relevant stakeholders will be important to complete the establishment of the NWT Cumulative Impact Monitoring Program.

Recommendation 18-13

The Panel recommends that the Minister of Indian Affairs and Northern Development consider appointing, as the Responsible Authority for the Cumulative Impact Monitoring Program under the Mackenzie Valley Resource Management Act, a corporate entity with a board consisting of one representative from each region in the Northwest Territories and representation from the appropriate government departments of Canada and the Northwest Territories. The Panel also recommends that the Responsible Authority for the Cumulative Impact Monitoring Program have a technical committee and a full-time secretariat to support the board.

Response

The Government of Canada accepts the intent of this recommendation.

The Minister for Indian and Northern Affairs Canada, as the Federal Minister responsible for the

NWT Cumulative Impact Monitoring Program, will consider options for a management structure including a secretariat and a technical advisory committee. The Government is committed to consult with affected Aboriginal groups and relevant stakeholders during the development of the NWT Cumulative Impact Monitoring Program management structure.

Recommendation 18-14

The Panel recommends that, within six months of the date of the Government Response to the Panel's Report, the Minister of Indian Affairs and Northern Development take all reasonable steps to extend the legal application of the Cumulative Impact Monitoring Program into the Inuvialuit Settlement Region, thereby making the program a legal requirement throughout the Northwest Territories.

Response

The Government of Canada accepts the intent of this recommendation.

The Government of Canada notes that implementation of this recommendation may require an amendment to the Inuvialuit Final Agreement which could not be achieved within the specified timeline.

Any steps to extend the legal application of the NWT Cumulative Impact Monitoring Program into the Inuvialuit Settlement Region could be discussed within the Inuvialuit Final Agreement implementation process. Discussions with the Inuvialuit institutions would be necessary to determine if there is an interest in adjusting their negotiated resource management system to include the NWT Cumulative Impact Monitoring Program.

The Government of Canada recognizes the importance of monitoring, and is currently working with the Inuvialuit Regional Corporation to implement a comparable program within the Inuvialuit Settlement Region. This program will be consistent with the "Memorandum of Understanding Concerning Inuvialuit Participation in the Northwest Territories CIMP and Audit" that is currently in place to enable the Inuvialuit to benefit from the NWT Cumulative Impact Monitoring Program activities and programs where the scope extends into the Inuvialuit Settlement Region.

Recommendation 18-15

The Panel recommends that, within six months of the date of the Government Response to the Panel's Report, the Government of Canada make available sufficient long-term stable funding to implement the Cumulative Impact Monitoring Program as specified in Panel Recommendation 18-16 and as required by law.

Response

The Government of Canada accepts the intent of this recommendation.

The Government notes that the implementation cannot be completed within six-months of the Governments' Response.

The Government supports the provision of adequate and appropriate funding for the implementation of the NWT Cumulative Impacts Monitoring Program. Canada's broad-based responsibilities to implement the NWT Cumulative Impact Monitoring Program (including the Government's responsibility towards cumulative effects management in the Northwest Territories) recently received funding in Budget 2010: Leading the Way on Jobs and Growth. Indian and Northern Affairs Canada is working towards the full implementation of the NWT Cumulative Impact Monitoring Program with the support of its partners and stakeholders which will include regional cumulative effects strategies, including a consideration of Mackenzie Gas Project impacts.

Recommendation 18-16

The Panel recommends that when establishing the Cumulative Impact Monitoring Program (CIMP), the Minister of Indian Affairs and Northern Development authorize the CIMP Responsible Authority to do the following:

- *establish an integrated set of biophysical and socio-economic indicators for the entire Northwest Territories;*
- *establish an integrated set of thresholds for evaluating cumulative impacts and levels of acceptable change in the biophysical and the socio-economic environments;*
- *establish a program for conducting scenario-based cumulative impacts assessments;*
- *establish a program for monitoring the interaction of cumulative impacts on multiple valued components;*
- *establish Traditional Knowledge study programs;*
- *provide guidance to impact assessment monitoring programs of the Mackenzie Gas Project and other activities regarding the form in which data is to be collected and provided to the CIMP;*
- *establish protocols for data access, control and release;*
- *establish a program for reporting monitoring results to appropriate agencies at a time and frequency that meets the need of the particular agency including the provision of results of the CIMP to the Mackenzie Valley Environmental Impact Review Board, Land Use Planning Boards, NWT Oil and Gas Socio-Economic Advisory Board, Corporation for the Mitigation of Mackenzie Gas Project Impacts, regulators, government departments and renewable resource management agencies for the purpose of informing the decisions of those agencies; and*
- *provide guidance to the Land Use Planning bodies on cumulative impact thresholds.*

Response

The Governments of Canada and the Northwest Territories accept the intent of this recommendation.

Governments will work with the NWT Cumulative Impacts Monitoring Program Partners to consider how to implement the components of the Program. In establishing an integrated list of biophysical and socio-economic indicators it is noted that it may not be appropriate to set thresholds to determine "acceptable levels of change" in relation to all socio-economic impacts.

The Government of the Northwest Territories notes that the Bureau of Statistics is a primary source of data and analysis for socio-economic indicators within the Northwest Territories. The Government is committed to assisting the NWT Cumulative Impacts Monitoring Program Partners to meet the socio-economic elements of the recommendation.

Recommendation 18-17

The Panel recommends that the Cumulative Impact Monitoring Program establish a program for integrated long-term aquatics monitoring of the Mackenzie River watershed that is consistent with and contributes to the Canadian Aquatic Biomonitoring Network.

Response

The Government of Canada accepts the intent of this recommendation.

The Government clarifies that the program to be established for integrated long-term aquatics monitoring of the Mackenzie River watershed under the NWT Cumulative Impacts Monitoring Program would be limited to the Northwest Territories portion of the Mackenzie River watershed. The Government is committed to consult with affected Aboriginal groups and relevant stakeholders during the establishment of this program as a component of the NWT Cumulative Impacts Monitoring Program.

Recommendation 18-18

The Panel recommends that the cumulative impact components of the follow-up program for the Mackenzie Gas Project be conducted within the operational framework of and under the guidance of the Responsible Authority for the Cumulative Impact Monitoring Program.

Response

The Government of Canada accepts the intent of this recommendation.

The Minister of Indian and Northern Affairs Canada, as the Federal Minister responsible for the NWT Cumulative Impacts Monitoring Program is a Responsible Authority for the follow-up program for the Mackenzie Gas Project and will ensure the cumulative impacts follow-up program is informed by the NWT Cumulative Impact Monitoring Program established protocols, guidance and principles.

Recommendation 18-19

The Panel recommends that the follow-up program for the Mackenzie Gas Project include a scenario-based cumulative impacts assessment for the Mackenzie Gas Project in combination with other developments that:

- *identifies plausible scenarios of development that could be induced by the Mackenzie Gas Project, including consideration of those formally presented to the Panel by hearing participants, and that give explicit attention to impacts from climate change;*

- *focuses on the sustainability of valued components in the human and biophysical environments and identifies anticipated cumulative impacts (positive and negative);*
- *identifies priority valued components to be monitored in the follow-up program;*
- *includes the full spatial extent of the Mackenzie Valley from the Proponents' Anchor Fields and adjacent areas in the Mackenzie Delta to the Alberta border and reflects the geological potential of areas for future development;*
- *includes as its temporal scale the anticipated life of the Mackenzie Gas Project and beyond decommissioning;*
- *is informed by relevant audit reports;*
- *is conducted by an independent facilitator and designed with the appropriate expertise; and*
- *includes the participation of the appropriate stakeholders.*

The Panel further recommends that the first scenario-based cumulative impacts assessment for the Mackenzie Gas Project be initiated within six months of the designation of the Responsible Authority for the Cumulative Impact Monitoring Program and that it be reviewed and revised every three years thereafter for the life of the Mackenzie Gas Project.

Response

The Government of Canada accepts the intent of this recommendation.

The follow-up program for the Mackenzie Gas Project will include a scenario-based cumulative impacts assessment which will incorporate the elements proposed in this recommendation, as appropriate. The Government is committed to consult with affected Aboriginal groups and relevant stakeholders during the development of a scenario-based cumulative impacts assessment.

Recommendation 18-20

The Panel recommends that the Department of Indian Affairs and Northern Development require the follow-up program for the Mackenzie Gas Project to establish and conduct a Mackenzie Gas Project cumulative impact monitoring program that:

- *reflects the priority valued components and indicators identified by the scenario-based cumulative impacts assessment;*
- *requires governments, Aboriginal authorities and the Proponents to develop and design integrated research protocols for the Mackenzie Gas Project that meet the monitoring needs for Project impact monitoring and cumulative impact monitoring;*
- *identifies the indicators for which data will be required for the Mackenzie Gas Project cumulative impacts follow-up program;*
- *includes as appropriate:*
 - *select regional or community Traditional Knowledge studies;*
 - *Project-specific impact monitoring information provided by the Mackenzie Gas Project and regulators;*
 - *interaction of cumulative impacts on multiple valued components; and*
 - *is designed in conformity with the provisions of Panel Recommendation 18-3.*

The results of the Mackenzie Gas Project scenario-based cumulative impacts assessment and monitoring programs should be transmitted to downstream regulators, government agencies, Land Use Planning bodies, the NWT Oil and Gas Socio-Economic Advisory Board, and the Corporation for the Mitigation of Mackenzie Gas Project Impacts for the analysis of cumulative impacts and, for the purpose of transition planning, the Government of the Northwest Territories.

Response

The Government of Canada accepts the intent of this recommendation.

The Government will ensure its implementation through the follow-up program as identified in the Governments' Response to recommendation 18-1.

Recommendation 18-21

The Panel recommends that regulators, as a condition of any approvals or permits they might issue for activities and projects, require all proponents of future developments that would enable the throughput of the Mackenzie Valley Pipeline to be increased above 0.83 Bcf/d to provide relevant impact monitoring data to the cumulative impacts monitoring program.

Response

The Government of Canada does not accept this recommendation.

The Government notes that this recommendation refers to a future regulatory decision, and that the discretion of those regulators should not be fettered. The Joint Review Panel's recommendations will be available for consideration by regulators when applications for future activities come before them.

The Government will work with proponents of future developments to encourage the provision of relevant impact monitoring data into the NWT Cumulative Impacts Monitoring Program. Future developments that may cause the throughput of the Mackenzie Gas Project to be increased over 0.83 Bcf/d would be subject to environmental screening processes on their own merits under appropriate legislation. Approval for such (future) developments may include direction to proponents to provide data in a form and manner suitable to Government and other regulators.

Recommendation 18-22

The Panel recommends that the Minister of Indian Affairs and Northern Development, as part of the follow-up program, require a Project-specific audit pursuant to section 148 of the Mackenzie Valley Resource Management Act each year during construction and at least once every five years for the life of the Mackenzie Gas Project to assess the effectiveness of the impacts monitoring regime for the Project. There may be more than one audit in any given year and an audit may focus on one or more component of the Mackenzie Gas Project.

Response

The Government of Canada accepts the intent of this recommendation.

The Government notes that Section 148 of the *Mackenzie Valley Resource Management Act* does not provide the authority to conduct project-specific audits as this is not the intent of this Section.

The Government agrees that an audit should be part of the follow-up program to assess the effectiveness of the impacts monitoring regime for the Project.

The Government does not agree with the frequency of the audit process proposed in the recommendation and will consider the frequency of audits in the development of the Mackenzie Gas Project cumulative impacts follow-up program.

Recommendation 19-1

The Panel recommends that the Annual Report to Parliament of the Commissioner of the Environment and Sustainable Development include a report on the implementation of the Panel's recommendations by the governments of Canada and the Northwest Territories. The first report should occur no later than one year after the date of the Government Response to the Panel's Report and occur annually thereafter for the life of the Mackenzie Gas Project.

Response

The Governments of Canada and the Northwest Territories note that this recommendation is outside the scope of the Joint Review Panel's mandate and therefore the Governments do not accept this recommendation. The "Agreement for the Environmental Impact Review of the Mackenzie Gas Project", which came into effect on August 3, 2004, sets out the specific and detailed mandate for the Joint Review Panel's environmental impact review. The recommendation is beyond a reasonable recommendation that would flow from considerations of the Joint Review Panel with respect to the environmental impacts of the Mackenzie Gas Project.

The Commissioner of the Environment and Sustainable Development is an officer independent of the Government of Canada as outlined in the *Auditor General Act*. As such, the Government of Canada cannot direct the Commissioner to report on the implementation of the Joint Review Panel recommendations. Nevertheless, the Government of Canada remains subject to the scrutiny of the Office of the Auditor General of Canada which audits government operations and reports to Parliament concerning the Government's stewardship of public funds.

Furthermore, the Government of the Northwest Territories has developed an Environmental Assessment Tracking System to track and report on the government's achievement of its responsibilities as well as the Proponents' commitments related to the mandate of the Government of the Northwest Territories.

Recommendation 19-2

In the event that the Commissioner of the Environment and Sustainable Development does not

accept Panel Recommendation 19-1, the Panel recommends that the governments of Canada and the Northwest Territories jointly establish an independent mechanism to review and publicly report annually on the implementation by the governments of the Panel's recommendations.

Response

The Governments of Canada and the Northwest Territories note that this recommendation is outside the scope of the Joint Review Panel's mandate and therefore the Governments do not accept this recommendation. The "Agreement for the Environmental Impact Review of the Mackenzie Gas Project", which came into effect on August 3, 2004, sets out the specific and detailed mandate for the Joint Review Panel's environmental impact review. The recommendation is beyond a reasonable recommendation that would flow from considerations of the Joint Review Panel with respect to the environmental impacts of the Mackenzie Gas Project.

The Governments do not agree that an independent mechanism to review and report on the implementation is required. Nevertheless, the Government of Canada remains subject to the scrutiny of the Office of the Auditor General of Canada which audits government operations and reports to Parliament concerning the government's stewardship of public funds. The Governments are committed to implementing the recommendations of the Joint Review Panel in accordance with the Governments' Response.

Furthermore, the Government of the Northwest Territories has developed an Environmental Assessment Tracking System to track and report on the government's achievement of its responsibilities as well as the Proponents' commitments related to the mandate of the Government of the Northwest Territories.

The Government the Northwest Territories notes that section 8 of the Mackenzie Gas Project Socio-Economic Agreement defines the reporting requirements of the Government the Northwest Territories in relation to many aspects of the socio-economic recommendations and commitments for the Project.