

Guidance for the Content of Public Hearings

The purpose of this document is to provide general information about the range and scope of the topics that the Joint Review Panel (the Panel) expects to hear about during the public hearings phase of environmental impact review of the proposed Mackenzie Gas Project (MGP). This information is intended to assist participants in preparing for the hearings. **However this information is for general guidance only. The Panel may vary the range, scope, and order of topics as it deems necessary.**

The hearings will address six general themes:

- Theme 1: Setting the Scene – Project Description and Assessment Methodology
- Theme 2: Physical Environment – Land, Water and Air
- Theme 3: Biological Environment – Fish and Wildlife and Their Habitats, Conservation Measures
- Theme 4: Human Environment – Economic Impacts
- Theme 5: Human Environment – Socio-cultural Impacts
- Theme 6: Project Alternatives, Cumulative Impacts, and Project Net Effects and Trade-offs after Enhancement, Mitigation and Follow-up

These themes include several topics, each of which contains many specific matters for discussion. The manner in which each topic is treated in any particular hearing will vary, depending on whether that hearing is a General Hearing, a Technical Hearing, or a Community Hearing.

This document also describes the three different types of public hearings, and the different approach and opportunity that each offers for the presentation of information and comments, and the discussion of topics. The Panel's *Direction on Procedures for Hearings* details how it will conduct each type of hearing.

Types of Public Hearings and Related Topics

The hearings are an important element of the Panel's review of the proposed MGP. They are *public* hearings and as such they present an essential opportunity for public participation in the Panel's review. Public hearings will provide a unique forum for Northerners to express their views about the proposed MGP, and to present their knowledge and understanding directly to the Panel about how people and the environment could be affected by it.

The objectives of the public hearings are to provide opportunities for:

- the proponent of the MGP (the Proponent) to explain the project and to respond to comments, questions and concerns raised by other Parties and the general public during the hearings;
- individuals, organizations and government representatives to provide their views on all aspects of the proposed MGP within the mandate of the Panel, including the implications of the proposed Project for the people and natural environment in those regions in which the MGP would be located; and
- the Panel to receive information that will help in thoroughly examining the matters relevant to its mandate.

The public hearings will generally follow a format that begins with opening comments from the chairperson, a presentation by the Proponent describing the project in general or a specific project-related topic to be addressed at the session, and presentations by registered participants. Questions may be asked of any presentation by the Panel, the Proponent, and Interveners, in accordance with the Panel's *Direction on Procedures for Hearings*.

The hearing requirements for registration and for filing submissions are set out in the Panel's *Direction on Procedures for Hearings*.

The Panel will hold three types of hearings:

1. Community Hearings

The Panel will hold Community Hearings in the Project Area as defined in the Environmental Impact Statement. Community Hearings will be held to promote the full and open participation of people living near the location of the proposed project. Community Hearings are intended to provide a more informal setting than Technical or General Hearings. Participants may speak to any matter of interest and concern within the mandate of the Panel, relating, for example, to any of the six general themes noted above. At these hearings, priority will be given to people and organizations from the community in which the hearing is held. In Community Hearings, residents will have the opportunity to participate directly and make presentations in their own languages and in their own ways.

The Panel proposes to hold Community Hearings in Inuvik, Tuktoyaktuk, Sachs Harbour, Holman, Paulatuk, Aklavik, Tsiigehtchic, Fort McPherson, Fort Good Hope, Colville Lake, Deline, Tulita, Norman Wells, Fort Simpson, Wrigley, Fort Liard, Trout Lake, Jean Marie River, Kakisa, Fort Providence, Hay River/Hay River Reserve and High Level.

2. General Hearings: Open and Topic-Specific

General Hearings will provide the opportunity for organizations, businesses or individuals to make presentations to the Panel on any of the topics outlined in the attached document (*Outline of Topics for Technical and General Hearings*) or any other matter within the scope of the review. General Hearings are not limited to Interveners and do not require the presentation of expert opinion and knowledge. General Hearings are a means for participants to formally convey to the Panel their ideas, interests, positions and concerns regarding the Project. Presentations are generally limited to a maximum of 15 minutes and may be followed by a question and answer period. Registration with the Panel Manager is requested at least 30 days before the scheduled General Hearing session and written submissions should be filed with the Panel Manager 10 days in advance of their scheduled presentation.

The Panel proposes to hold open General Hearings in Tuktoyaktuk, Inuvik, Fort Good Hope, Tulita, Norman Wells, Fort Simpson, Yellowknife, Hay River/Hay River Reserve, High Level, Edmonton, Calgary and Whitehorse.

The Panel recognizes that formal presentations on some topics, especially those relating to the biological and human environment, will be made by individuals, organizations or institutions with a special interest in and responsibility for matters associated with public expenditures, public policies, programs and services, rather than by technical experts as such. Consequently the Panel may devote certain General Hearings (or portions of them) to specific topics identified below, in order to relax some of the rules that apply to Technical Hearings. Topic-specific General Hearings will be designated as such in the hearings schedule when it is released. Some topic-specific General Hearings may be organized in more than one regional centre, if the subject matter and public interest require it.

The Panel may designate any part of a General Hearing in Inuvik, Tuktoyaktuk, Norman Wells, Fort Good Hope, Tulita, Fort Simpson, Hay River/Hay River Reserve, and Yellowknife as a topic-specific General Hearing.

3. Technical Hearings

The Panel will hold Technical Hearings in some of the larger centres. Technical Hearings provide a forum for expert opinion (whether based on scientific or traditional knowledge) on a particular subject, and are restricted to technical experts and specialist advisors brought forward by the Proponent, Interveners or the Panel. Registration with the Panel Manager is required 30 days prior to the hearing. Presenters at Technical Hearings must file their submissions in writing 15 days in advance of the hearing, and will be subject to detailed questioning. The Panel proposes to hold Technical Hearings in Inuvik, Tuktoyaktuk, Norman Wells, Fort Simpson, Hay River/Hay River Reserve and Yellowknife

Outline of Topics for Technical and General Hearings

Theme 1 – Setting the Scene

Topic 1. Project Description

The purpose of this session is to describe the features of the project that may have impacts on the social, economic, cultural or biophysical environments, as a basis for further examination of those impacts at subsequent sessions. Only the Proponent will present evidence. Questions of clarification relating to the nature, but not the impacts, of the Project may be raised at this session.

The Panel expects the Proponent to provide information on the scope, nature, and setting of the project, including its general requirements, facilities and installations, locations, associated infrastructure, footprint, logistics, transport, costs, and workforce, during each phase of the project (construction, operation, decommissioning and abandonment). The description should include basic information on employment and rotation schedules. It should also identify design characteristics that allow for uncertainties and enable adjustments in the event of unforeseen conditions, accidents, malfunctions, or unforeseen impacts. It should indicate alternative means of carrying out the project and why the proposed means are the preferred ones.

Topic 2. Approaches to and Methods for Evaluating the Information in the EIS and Supplementary Submissions

This session is intended to identify general approaches and specific methods for evaluating and assessing information about project impacts (positive and negative) and their significance. The objective is to ensure that the Panel and Parties to the review are aware of several different perspectives and contemporary approaches to, and methods of, impact assessment. It is not the Panel's intention at this stage, however, to endorse, recommend or justify any particular approach.

The Proponent will explain the methods and approaches used in its EIS and supplementary information for assessing the impacts of the Project, and in determining the significance of those impacts.

The Panel is planning to commission expert reviews of the following issues in impact assessment:

- Identification and use of socio-economic and socio-cultural indicators in the assessment and monitoring of cumulative impacts resulting from oil and gas development in Alaskan communities
- Approaches to the application of sustainability-based assessment criteria, and evaluations of project contributions to sustainability
- Approaches to and methods for significance determination

- Approaches to the determination and cumulative impacts assessment of future development scenarios.

Other participants may wish to present expert opinion on other methodological issues in impact assessment, for example:

- The selection and verification of valued components, including social, economic and cultural as well as biophysical components
- Assessment boundaries
- Identification of verifiable impact hypotheses and impact pathways
- Use of traditional knowledge in impact assessment.

Alternatively, participants may wish to raise such issues of impact assessment methodology in the particular context of their presentations on particular subject matters at a later stage in the hearings.

Themes 2 and 3 – Physical and Biological Environments

While the Panel will for the most part treat the physical and biological environments as separate hearing topics, in some cases they may be combined in the same session for reasons of scheduling or logistics.

Theme 2 – Physical Environment - Land, Water, and Air

These sessions will focus on how Project design, route, and site selection are intended to avoid or minimize terrain degradation and hydrological disruption under both present conditions and their possible variability, and possible future conditions as these might be altered by the Project itself or by such exogenous factors as climate change. To the extent that adverse impacts on terrain, the marine environment, water, and air may nonetheless occur as a result of construction or operation, each session will also address the nature and certainty of these impacts, how and whether these impacts can be mitigated, and the likely effectiveness of such mitigation. Sessions will be organized according to four main topics:

- routing and siting in relation to terrain and hydrology
- the marine environment
- the aquatic environment
- atmospheric emissions and noise.

The Panel expects presentations to address the inter-relations of environmental systems and among Valued Components, as well as impacts on individual Valued Components.

Topic 3. Project Routing and Design in Relation to the Physical Environment

This session will focus on the relation between the design, routing and siting of the MGP and the physical environment, with particular emphasis on permafrost conditions. Matters for discussion should include:

- Project construction and operating impacts on the permafrost regime (including pipe-laying and stream crossing methods, and operating temperatures) that may affect terrain, slope stability, subsidence, and erosion
- Project construction and operation impacts on the permafrost regime that may affect hydrology: stream and groundwater flow, surface runoff, ponding
- Effects of gas field subsidence
- Geological instability and hazards.

The Panel intends to hold two separate sessions on these topics, in different parts of the Project Area. The Panel may combine elements from other subject areas at particular hearing sessions, for example, gas field subsidence, submergence, vegetation change, and impacts on waterfowl and the Kendall Island Bird Sanctuary (see topics 4, 8, and 9).

Topic 4. Marine Environment, Marine Habitat and Marine Mammals

This session will focus on how the MGP might interact with the marine environment, marine habitat, marine mammals and fish, and how these may have affected the design of the MGP and associated mitigation measures.

Matters for discussion should include:

- Sea level change, storm surges, shoreline erosion/submergence
- Dredging, spoil disposal and sedimentation
- Marine transport
- Noise in the marine environment
- Impacts on marine mammals
- Impacts on marine fishes.

Topic 5. Water Quality and Quantity

This session will focus on how the MGP might interact with the aquatic environment and how that environment may have affected the design of the MGP and associated mitigation measures. This topic is closely related to topic 7 (fish and aquatic habitat), and the two may be merged in whole or in part at hearing sessions.

Matters for discussion should include:

- Effects of Project-induced changes in stream, groundwater, and surface flow
- Extent and effects of Project water withdrawals, effluents, and in-stream activities
- Effects of Project-induced Mackenzie River traffic
- Possible changes in water levels and flows
- Possible changes in sedimentation, turbidity, and contamination.

Topic 6. Greenhouse Gas Emissions, Air Quality and Noise

This session will focus on how the MGP might interact with the atmospheric environment, and the measures proposed to mitigate any adverse impacts on that

environment. Consideration will be given to how the Project might contribute by virtue of its construction and normal operation to greenhouse gases, as well as to the nature and extent of project-related emissions, dust, and noise, and the potential adverse impacts of these on aquatic and terrestrial environments.

Matters for discussion should include:

- Greenhouse gas emissions
- Project-related emissions, including dust and contaminants
- Project-related noise.

Theme 3 – Biological Environment – Fish and Wildlife and Their Habitat; Conservation Measures

These sessions will address the potential effects of the Project on the biological environment (separately in the aquatic and terrestrial environments, but also with attention to any overlapping and interactive impacts). These sessions will consider the temporary and lasting impacts of the Project on the biological environment as it now exists and as it may evolve during the life of the Project, the certainty of those impacts, the anticipated effectiveness of proposed mitigation of adverse impacts in design, construction, or operation in the northern environment, and the potential for enhancements (e.g. through rehabilitation or replacement). As well, these sessions will consider the potential impacts of the Project on the maintenance and development of the tools for promoting environmental conservation and rehabilitation.

Sessions will be organized according to three main topics: fish and aquatic (freshwater) habitat; wildlife and birds and their habitat; and conservation areas and measures (the tools for maintaining habitat integrity and wildlife populations).

The Panel expects presentations to address issues of ecosystem structure, function, integrity, and viability, as well as issues related to particular Valued Components. The Panel expects that the sessions will also identify indirect as well as direct impacts, and identify changes in the environment that are not caused by the Project, but that may combine with any Project-induced impacts. Consideration of the biological environment must address Project impacts on the capacity of renewable resources to meet existing and future needs, and any changes that the Project may cause to any species (including its critical habitat), listed under the federal *Species at Risk Act*.

Topic 7. Fish and Aquatic Habitat

This topic is closely related to topic 5 (Water Quality and Quantity), and these two topics may be merged in whole or in part during hearing sessions.

Matters for discussion should include:

- Impacts on aquatic and riparian habitat

- Impacts on fish populations
- Impacts of increased human access.

Topic 8. Wildlife and Wildlife Habitat, including Birds and Bird Habitat

Matters for discussion should include:

- Impacts on vegetation
- Direct and indirect impacts on wildlife and bird species and their habitat
- Visual or auditory disturbances
- Impacts on birds and bird habitat (with particular emphasis on the Kendall Island Bird Sanctuary area) from Project-induced subsidence
- Impacts of increased access.

Topic 9. Conservation Areas and Measures

Matters for discussion should include:

- Habitat fragmentation and connectivity
- Heritage and cultural resources, sites and trails
- Existing and proposed protected areas and networks and special management areas
- Systems and methods for designating and protecting conservation areas (federal, territorial, and claims-based), resources required, and potential effectiveness
- Species listed under the federal *Species at Risk Act*
- Relevant policies, regulations, management plans, or other measures, to protect or enhance fish and wildlife and habitat, and cultural and heritage resources.

The Panel intends to hold two separate sessions on topics 8 and 9, in different parts of the Project area.

Themes 4 and 5 – Human Environment: Economic and Socio-cultural Impacts

The Panel recognizes that these two themes are often interconnected, although for the purpose of hearing sessions they have been separated. The Panel anticipates that many presentations at General Hearing sessions will address economic impacts, and that many people at Community Hearings will speak to both themes. It is not the Panel's intention to limit discussion to these themes to Technical Hearings.

Presentations on topics in either group should address issues such as the distribution of positive and negative impacts, and the sustainability of benefits. Presentations should address not only specific impacts on individual Valued Components, but also the interrelations of key indicators at the community, regional, and territorial levels, and potential trade-offs among them. The Panel expects that the sessions will also identify and explain indirect as well as direct impacts, and institutional as well as community or culturally-specific vulnerabilities and opportunities for enhancements.

The description of the human environment should identify and explain important interrelationships, processes and systems, and changes in the human environment that are not caused by the Project, but that may combine with those impacts related to the Project or cause a change to the Project.

Topics under the Human Environment themes are of widespread public interest to individuals, organizations or institutions with a special interest in and responsibility for matters associated with public expenditures and public policies, and programs and services. The Panel recognizes that expertise in these areas is not limited to technical experts as such. Consequently some of the matters listed below may be addressed in Topic-specific General Hearings, in order to relax some of the rules that apply to Technical Hearings, and to facilitate presentations by interested participants.

Theme 4 – Human environment: Economic impacts

These sessions will address Project impacts on the formal and informal economic environment. The sessions will consider the temporary and lasting impacts of the Project on the economic environment as it now exists and as it may evolve during the life of the Project, the certainty of those impacts, the anticipated effectiveness of proposed mitigation of adverse impacts, and the potential for enhancement of beneficial impacts (whether resulting directly from the Project or from cumulative impacts).

These sessions will also consider the impacts of the Project on the maintenance and development of the institutional tools for promoting durable economic gains.

Topic 10. Education, Training, Employment, and Procurement

This session will focus on specific Project-related opportunities and constraints and comparative adverse and beneficial effects with respect to the subject matter. Matters for discussion should include:

- Education and training
- Employment, points of hire and conditions of work
- Labour force impacts
- Business opportunities and procurement.

Topic 11. Project-related Expenditures and Economic Benefits

This session will address the direct, indirect and induced economic inputs and benefits of the Project on local, regional, territorial, provincial and national economies.

Matters for discussion should include:

- Expenditure and investment impacts, including local and regional spin-off economic activity from wages and purchases related to the Project
- Employment income to persons, and its distribution

- Revenues to governments, and their distribution
- Constraints that could affect economic benefits or opportunities.

Topic 12. Project-related Economic Costs and Physical Infrastructure Impacts

This session will address the direct and indirect economic costs and impacts of the Project on local, regional and territorial economies, infrastructures and institutions.

Matters for discussion should include:

- Community income and household economics
- Local consumer prices, inflation and cost-of-living
- Foregone or precluded economic opportunities
- Impacts on local and regional physical infrastructure (including transport and communications), municipal services, institutional capacity
- Quarries and quarry materials availability
- Housing availability, accessibility, quality and affordability.

Theme 5 – Human Environment: Socio-cultural Impacts

These sessions will address temporary and lasting impacts on the socio-cultural environments potentially influenced by the Project. The sessions will consider impacts of the Project on the socio-cultural environment as it now exists and as it may evolve during the life of the Project, the certainty of those impacts, the anticipated effectiveness of proposed mitigation of adverse impacts, and the potential for enhancements through effective responses to current socio-cultural problems. As well, these sessions will consider the impacts of the Project on the maintenance and development of the institutional tools for socio-cultural protection and enhancement. The Panel expects that the Parties will address the residual impacts (if any) of the Project after the period of peak construction employment and after the Project is decommissioned.

The Panel expects that information on these matters will be presented at Community, General, and Technical hearings. The Panel intends to hold separate topic-specific General Hearings on topics 13 and 14 in each region, in order to address regional concerns.

Topic 13. Harvesting and Other Land Use

This session will address the potential impacts of the Project on subsistence, sport and commercial harvesting and other land uses.

Matters for discussion should include:

- Project and cumulative impacts on wildlife and fisheries abundance, distribution, productivity, quality, and accessibility as these impacts may affect harvesters
- Direct impacts on harvesters and harvester access

- Potential impacts on land use, including land use patterns and specific sites or features
- Provisions for wildlife compensation
- Worst Case Scenario (applicable in the Inuvialuit Settlement Region).

Topic 14. Socio-cultural Impacts

This session will address the potential direct and indirect impacts of the Project on human health and community wellness, with particular attention to Project-related impacts on social and cultural patterns and cohesion, and the capacity of people, communities and institutions to respond and adapt to Project-induced social, cultural and economic change. Consideration will be given to the potentially variable effects of the Project on specific components of community and regional populations, particularly with respect to age, gender, status, occupation, and income.

Matters for discussion should include:

- Demographics, mobility
- Impacts of Project-related employment and income on community/family life, including child and elder care
- Impacts on human health and social determinants of health
- Impacts on community and personal wellness
- Impacts on living conditions including the role of subsistence and other activities for traditional purposes
- Impacts on social programs and health services
- Impacts on community/family capacity, resilience and support systems (social capital)
- Government policies and commitments as they relate to project activities and direct and indirect impacts.

Theme 6 – Project Alternatives, Cumulative Impacts, and Net Effects, and Trade-offs after Enhancement, Mitigation and Follow-up

The topics included under this theme are broad in scope. They are intended to consider the information presented in previous sessions and address project alternatives and project design options; future development scenarios as they relate to the assessment of cumulative impacts; environmental management plans, contingency plans, monitoring and follow-up programs; and the net contributions of the Project to environmental sustainability.

These sessions will address the overall impacts of and justifications for the Project in light of the general sustainability framework set out on the 18 July 2005 Panel determination of sufficiency to proceed to the hearings. It will consider the application of sustainability criteria in the evaluation of the net contribution of the Project in comparison with alternatives, in light of the proposed design and implementation features, and expected success of mitigation and enhancement efforts and continuing

uncertainties. Particular attention will be paid to the main lasting impacts (benefits, opportunities, adverse impacts, costs, risks, etc.), their nature, severity, certainty and distribution (over time, among places, and among interests). These sessions will also examine the justifications offered for the trade-offs involved.

Topic 15. Project Need, Purpose and Alternatives; Cumulative Impacts

The purpose of this session is to address two topics:

- Need for, purposes of, and alternatives to the Project, and alternative means of carrying out the Project; and
- Overall potential cumulative impacts of the Project, with consideration to cumulative impacts previously identified, and future development scenarios.

Topic 16. Environmental (Socio-cultural, Economic and Biophysical) Management Plans, Monitoring and Follow-up Programs

Topics should include:

- How the Project has been designed for accidents, malfunctions, and unforeseen impacts
- Preparations for accidents and malfunctions, including emergency preparedness and emergency response plans
- Biophysical environment management and protection plans and agreements
- Socio-cultural and economic monitoring plans and response plans
- Follow-up plans – compliance, inspection, monitoring
- Proposals for environmental monitoring and follow-up regimes
- Effectiveness of existing environmental monitoring and follow-up regimes.

Topic 17. Net Contribution of the Project (in Comparison with Alternatives)

These presentations should address the question of whether northerners will be better off as a result of the project, whether net benefits are sustainable, and what will be the distribution among individuals and communities of the costs and benefits of the Project.

Topics should include:

- Summary and comparison of adverse impacts, costs, and risks, and of benefits and opportunities, and their distribution in short and long term and among different interests (governments, private sector companies, communities, individuals)
- Trade-offs among anticipated gains and losses
- Identification and justification of trade-offs within particular areas (e.g. economic gains from taxes and royalties versus added costs and expenditures, or immediate gains versus longer term sustainability), and among the Valued Components
- Contributions from socio-economic agreements and access and benefits agreements
- Judgment on overall sustainability questions.

Further Information

For further information about the hearing topics please contact:

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