

10 MONITORING AND FOLLOW-UP

10.1 Introduction

The purpose of this section is to describe the proposed Socio-Economic Monitoring Plan. This plan is intended to meet regulatory requirements for follow-up on effects identified previously in this volume. A project of this magnitude will generate a range of positive and negative effects during construction. Because of the nature, scope and magnitude of the expected project-related effects, and in recognition of shared responsibility for effects management, the mitigation measures, management plans and programs that address the effects will require a coordinated and collaborative response from the project proponents and their contractors, affected communities, and territorial and federal government agencies. Mitigation measures, management plans and programs will need to be monitored throughout project construction and initial operations to:

- determine their effectiveness in reducing adverse effects and enhancing positive effects
- enable adjustments to be made where necessary
- develop new mitigation plans and programs, where required

The proposed Socio-Economic Monitoring Plan applies only to the Mackenzie Gas Project. The NOVA Gas Transmission Ltd. (NGTL) ancillary project in Alberta will develop and implement its own socio-economic programs, in consultation with affected parties.

10.2 Objectives

The objectives of the Socio-Economic Monitoring Plan are to:

- verify the accuracy and completeness of the socio-economic effects described in this volume and identify any additional effects
- determine the effectiveness of mitigation measures, management plans and programs in reducing or eliminating potential adverse effects
- determine the effectiveness of mitigation measures, management plans and programs in enhancing socio-economic benefits associated with the project
- adjust or develop new mitigation measures, as required
- provide direct and timely feedback to project managers, contractors, affected communities and government agencies

10.3 Monitoring Plan Strategy

Key Elements

The plan will use and supplement reporting required by regulators, the public, Government of the Northwest Territories (GNWT), and Aboriginal organizations and agencies.

The plan will use participative monitoring methods, recognizing that managing many socio-economic issues can only be effective if done with full cooperation of the project proponents, affected communities and government agencies. Decisions about suitable actions will require joint consideration by multiple stakeholders.

Regional committees will be created to monitor and report on:

- selected project-related effect indicators
- the effectiveness of mitigation measures, management plans and programs
- any unexpected effects that are identified

It is expected that three such committees would be required, one each for the Beaufort Delta Region (BDR) (Inuvialuit Settlement Region [ISR] and Gwich'in Settlement Area [GSA] combined), the Sahtu Settlement Area (SSA) and the Deh Cho Region (DCR). Monitoring committee composition should be based on the project-related effects selected for monitoring, and the agencies responsible for mitigating and managing the effects.

The monitoring committees will function as working groups and should be limited in size. Committee membership will be selected in consultation with affected communities, and the committees could have representatives, or could access information from:

- the project
- corridor communities
- regional health care and social services authorities
- local or regional RCMP detachments
- the pipeline working groups
- the GNWT, e.g., policy, resourcing and trans-regional issues coordination regarding:
 - transportation
 - economic development
 - education, culture and employment
 - health and social services

- local businesses
- local schools and Aurora College

Monitoring activities under the plan need to reflect the potential for community, regional and territorial socio-economic circumstances to change because of:

- normal growth
- the influences of other economic and political developments during construction and operations

Monitoring and analysis must attempt to distinguish between these effects and those of the project. The indicator information collected must be directly linked to the project.

An independent facilitator could be on each monitoring committee. The facilitator's responsibilities could include:

- arranging and facilitating committee meetings
- recording and circulating meeting minutes and assignments
- preparing annual monitoring reports for the committee
- liaison with the facilitators associated with the other regional committees to:
 - ensure consistency of purpose, process and intended outcomes
 - compare results

The monitoring committees should meet at least twice a year, more frequently if required.

As the project enters operations, and project-related activities and effects decrease, monitoring committee meetings could be reduced in frequency, until it is determined that the monitoring plan and committee are no longer needed.

Initial steps in developing and implementing the plan include:

- development of a conceptual plan
- meetings with study area communities to discuss the conceptual socio-economic monitoring plan, and the proposal for the regional committees to execute the plan
- regional workshops to identify and seek consensus on the conceptual plan, including:
 - project-related effects to be monitored
 - indicator data to be collected and reported on

- composition of regional monitoring committees
- schedules and locations of committee meetings
- nominating and selecting committee members in each region, to be completed at least six months before construction starts
- initial committee meeting in each region, scheduled before construction starts, to review and agree on the committee's mandate, tasks, process, schedules and intended outcomes
- developing operating budgets for the committees and determining responsibility for costs

The regional committees will be active before and during project construction. When project operations begin, it is expected that committee activities will decline, as described in Section 10.5, Project Effects Measurements – Operations.

10.4 Project Effects Measurements – Construction

The plan to monitor socio-economic effects during construction would include the list of effects identified previously in this volume. The process would require committee agreement on:

- project effects to be monitored
- indicator data for each effect
- frequency with which data readings are to be taken
- process of evaluating the indicator data and deciding what, if anything, needs to be done in addition to mitigation measures in place
- frequency with which the evaluations will be made
- period during which the effects are to be monitored

Four broad categories of project socio-economic effects were identified for monitoring. Each of these categories includes several topics. The committees might wish to focus on selected effects of concern because too many categories and subtopics could be unmanageable.

The four broad categories are:

- economic effects, including migration
- infrastructure, community service and governance
- individual, family and community wellness
- traditional culture

The indicator data for these effects includes relevant statistical data and reliable qualitative data. Primary reliance should be on quantitative data, with qualitative data used to help interpret the quantitative data. Where possible, simultaneous collection and analysis of quantitative and qualitative data is preferable, because each can serve as a check on the reliability of the other. Selecting indicators should take into account the availability of preproject baseline data, comparability across regions, and existing administrative data collection and reporting protocols.

The committee, or its designate, will write a report at the end of each construction year that describes:

- actual versus predicted effects
- effectiveness of mitigation and optimization measures
- recommendations for further mitigation or optimization measures, if warranted
- concerns that were addressed, related to socio-economic effects
- what management adjustments were made and with what effect

The committee, or its designate, will produce a final report describing:

- issues and challenges encountered during construction and first two years of operations
- responses
- effects of responses

This report will have relevance:

- when any project component is expanded or enlarged
- during future construction of a similar project, or similar project components

10.5 Project Effects Measurements – Operations

At the end of construction, and after the associated cleanup and site restoration, most employment and opportunities induced by the project will end. There will be ongoing well drilling activities, and operations and maintenance activities associated with the anchor fields, pipelines and associated facilities. The employment levels associated with these operations activities will be a small fraction of the peak construction workforce.

Therefore, throughout operations, there will be no substantial residual effects on infrastructure, family and community wellness conditions and services, or

preservation of any aspects of traditional culture. There will be no resulting need for mitigation measures, and no need for committees to monitor project effects.

The operations and maintenance employment generated will contribute to local capacity in only a few communities and will be long term. Training and employment for the long-term positions will be captured in indicator data before and during the first year or two of operations. Similarly, northern procurement for operations and maintenance of the anchor fields, pipelines and associated facilities will be established over the initial one or two years of operation. Beyond this period, project effects are expected to be largely undetectable and there would be limited value in continuing the socio-economic monitoring activities. The committees might choose to continue monitoring socio-economic information. However, the project's role will decline.

Ongoing reporting of benefits data will take place, consistent with any relevant requirements of project benefits and access agreements and the GNWT Socio-Economic Agreement.

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