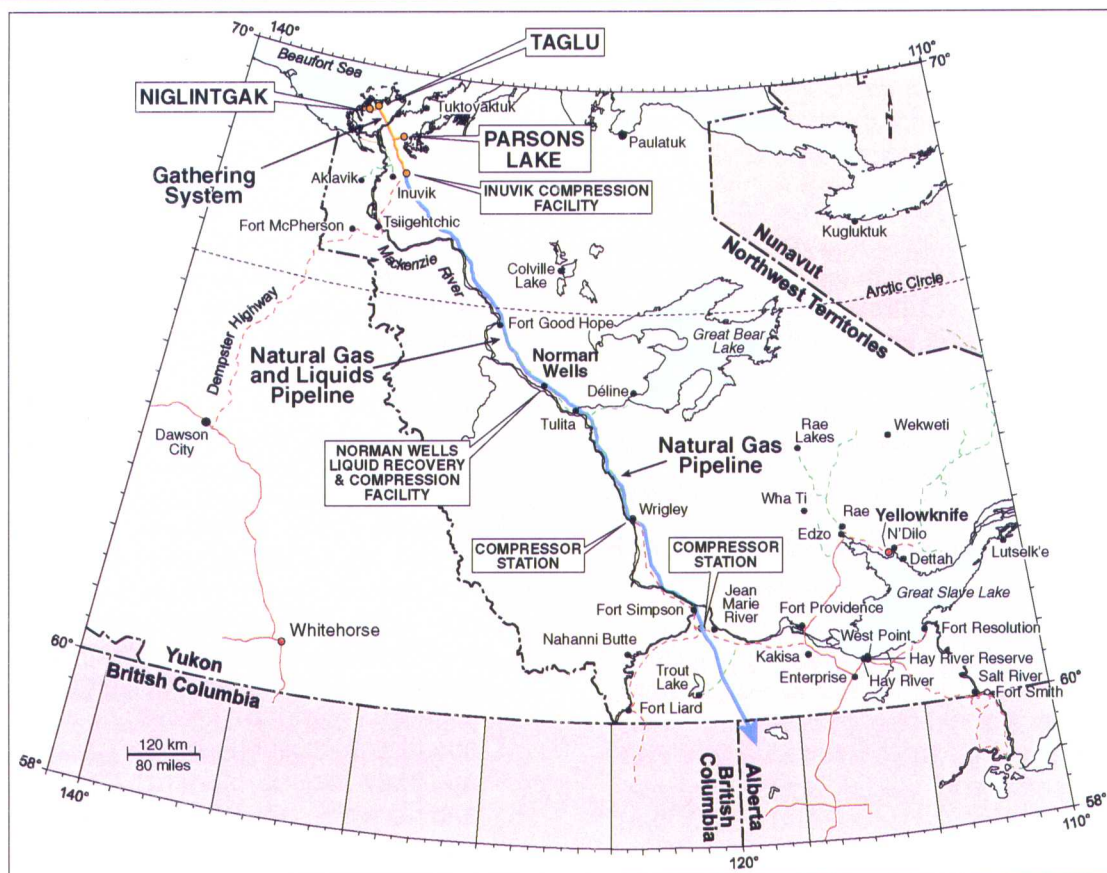


MACKENZIE GAS PROJECT ENVIRONMENTAL STUDIES



GENERAL INFORMATION

Imperial Oil Resources, CONOCO Canada Resources Limited, Shell Canada Limited, and ExxonMobil Canada are conducting a number of environmental studies during 2001-2002 as part of the Mackenzie Gas Project. The studies combine local knowledge, scientific research and existing information. An environmental study team, composed of TERA Environmental Consultants, in association with Kavik-AXYS Environmental Consulting Ltd., AMEC Earth and Environment Ltd., and Golder Associates Ltd., has been retained to conduct the environmental studies.

The current development idea consists of the following:

- ▶ gas wells in the Taglu, Niglintgak, and Parsons Lake natural gas fields;
- ▶ gathering pipeline system to bring production to the Inuvik area;
- ▶ gas compression facilities near Inuvik;
- ▶ a pipeline to transport natural gas and associated natural gas liquids from near Inuvik to Norman Wells;
- ▶ a pipeline to transport natural gas from Norman Wells to Alberta; and
- ▶ transport of natural gas liquids in the existing Enbridge pipeline from Norman Wells to Alberta.

COMMUNITY INPUT

- ▶ Community input is an important part of the environmental studies. In 2001, meetings were held with community organizations and regulatory bodies prior to conducting the initial studies in summer, 2001. At these meetings, the proposed studies were discussed and study methods and schedules were adjusted based on input received.
- ▶ During 2002, meetings will continue to be held with community organizations, including Renewable Resource Committees, Hunters and Trappers Committees and Band Councils. These meetings will be held to update the communities on the progress of the studies and to obtain advice on and input to future plans.

WHY ARE WE UNDERTAKING ENVIRONMENTAL STUDIES?

The collection of data during the environmental studies will be used to supplement and update the existing information. This information will be used as the basis for an environmental and social impact assessment, environmental protection plans and subsequent monitoring studies.

WHAT IS BEING STUDIED IN THE ENVIRONMENTAL PROGRAM?

The environmental team is conducting studies relating to the following topics:

- ▶ wildlife, plants and soils;
- ▶ fisheries, water quality, groundwater and surface water;
- ▶ geology, land forms, air quality and climate;
- ▶ economy, culture and community;
- ▶ Traditional Knowledge;
- ▶ existing land and resource use; and
- ▶ heritage resources.

WHAT IS THE CURRENT STATUS OF STUDIES BEING CONDUCTED?

Wildlife, Plants and Soils

2001 Activities

- ▶ Helicopter overflights were completed in the Inuvialuit Settlement Region, Gwich'in Settlement Area and portions of the Sahtu Settlement Area. Detailed ground surveys were conducted at locations selected during the overflight to verify vegetation and soils information and to further identify wildlife habitat. An aerial spring migratory bird survey was conducted in Alberta, the Deh Cho, the Sahtu Settlement Area and the Gwich'in Settlement Area. A fall migratory bird survey was conducted in the Inuvialuit Settlement Region.

Proposed 2002 Activities

- ▶ Helicopter overflights will be completed in Alberta, the Deh Cho and the remainder of the Sahtu Settlement Area. Detailed ground surveys will be completed throughout the study area, and may include mammal identification and counts, migratory bird surveys, further identification of important wildlife habitat, as well as more detailed vegetation and soils surveys.

Fisheries, Water Quality, Groundwater and Surface Water

2001 Activities

- ▶ Overflights were conducted in the Inuvialuit Settlement Region, the Gwich'in Settlement Area and the Sahtu Settlement Area. These surveys were done from a helicopter and helped to identify rivers and streams where more detailed studies are required. Detailed studies were begun at select sites in the Inuvialuit Settlement Region and the Gwich'in Settlement Area. Detailed studies were conducted at nine rivers and streams. These studies included water sampling for water quality testing;

measurement of width, depth and flow; and identification of important fish habitat and fish sampling (catch and release).

Proposed 2002 Activities

- ▶ Additional aquatic studies are planned for 2002. The main activities will be the completion of helicopter overflights in Alberta and the Deh Cho as well as the completion of detailed studies along rivers and streams identified during the overflights. Some spring and fall spawning studies and winter fish habitat identification will also be done.

Geology, Land Forms, Air Quality and Climate

2001 Activities

- ▶ Helicopter overflights were completed throughout the study area. It was determined during these overflights that no additional field investigations would be required for geology and land forms. Detailed air quality sampling was begun by installing air quality monitoring stations in Inuvik and Norman Wells.

Proposed 2002 Activities

- ▶ Detailed air quality sampling will be continued in 2002.
- ▶ Activities relating to land form and climate will be limited to office studies.

Economy, Culture and Community

2001 Activities

- ▶ Work plans were designed in 2001, however, no field work was initiated.

Proposed 2002 Activities

- ▶ In 2002, baseline information will be collected from existing local, regional and territorial sources. This information will then be discussed, supplemented and verified with community and regional officials.

Traditional Knowledge

2001 Activities

- ▶ Work plans were designed in 2001, however, no field work was initiated.

Proposed 2002 Activities

- ▶ In 2002, regulators and local authorities in each region will be consulted about the nature and extent of Traditional Knowledge data collection and reporting required to meet study needs. The objective will be to integrate Traditional Knowledge with 'western science' in the project. Specific knowledge sharing processes will be developed and put into place with local participation and agreement in each region.

Existing Land and Resource Uses

2001 Activities

- ▶ A fixed wing overflight was conducted along the entire study area to determine what non-traditional land uses may be present.

Proposed 2002 Activities

- ▶ Information relating to land and resource use within the study area will be gathered from meetings with local regulators and reviewing land use by-laws and development plans. Land and resource use will also be determined by reviewing government databases, if available.
- ▶ Other non-traditional resources users will be identified through a series of meetings with local and territorial or provincial regulators. Resource extraction companies with interest in the study area will be consulted to determine whether or not the project would interfere with their existing or future plans.

Heritage Resources

2001 Activities

- ▶ Existing government databases and publications have been reviewed to determine if any known historical, archaeological or palaeontological sites are encountered in the study area. Additional information on potential sites will be gathered from meetings with local regulators and community leaders. Helicopter overflights were conducted in the Inuvialuit Settlement Region, the Gwich'in Settlement Area and the Sahtu Settlement Area to identify areas where historical or archaeological sites may be found.

Proposed 2002 Activities

- ▶ Detailed surveys will be completed throughout the entire study area. All areas of interest, as determined during the overflights, will be visited to determine if historical, archaeological or paleontological resources are present.

HOW MANY STUDY CREWS CAN BE EXPECTED AT ONE TIME?

Environmental studies have been and will continue to be planned to prevent separate crews from working in the same location at the same time. All field crews will stay in accommodations located in the various communities within the study area.

LOCAL INVOLVEMENT

During field studies, opportunities have been and will continue to be available to local people. Elders and environmental assistants were present on most crews involved in the studies conducted in summer 2001. A similar or expanded level of involvement is anticipated in 2002.

Contact:

For further information, please Contact:

Alan Kennedy
Imperial Oil Resources Limited
237 - 4th Avenue S.W.
Calgary, Alberta T2P 3M9
Phone: (403) 237-3485
e-mail: alan.j.kennedy@esso.com