APPENDICES

APPENDIX 1
The Inquiry Process

The Inquiry Process

It is often said that commissions of inquiry have had little or no impact on public policy in Canada. I think this is wrong, as a glance at our history will show. The report of the Rowell–Sirois Commission, appointed in 1937, led to a rearrangement of taxing powers between the federal government and the provinces. The Rand Inquiry into the dispute between the Ford Motor Company and the United Auto Workers in Windsor in 1949, which resulted in the Rand formula, has been regarded ever since as a watershed in labour-management relations in Canada. The Hall Commission on Health Services had and continues to have a great impact on governments, the health professions, and the provision of health services in our country. The recommendations of the Norris Commission, which investigated the disruption of shipping on the Great Lakes, resulted in a major union being placed under government trusteeship.

Commissions appointed by provincial governments have also been influential. The Meredith Commission, appointed in 1911 in Ontario, led to the establishment of Workmen's Compensation Boards first in Ontario and then throughout the country. The Hall–Dennis Commission, appointed by the government of Ontario, and the Parent Commission, appointed by the government of Quebec, have both had a great impact on education in Canada.

There have also been joint federal-provincial commissions of inquiry, such as the McKenna–McBride Commission, whose recommendations regarding Indian reserve lands in British Columbia were adopted, for good or ill, by both governments.

We are all aware of the continuing influence in our federal system today of the recommendations of the Royal Commission on Bilingualism and Biculturalism. The recommendations of the LeDain Commission have been influential in moulding social attitudes toward the non-medical use of drugs in our society. Then, of course, the recommendations of the Royal Commission on the Status of Women constitute a standard against which the progress of the federal government and the provincial governments toward the enactment of legislation to establish equality for women can be measured.

Thus the work of commissions of inquiry has had a significant influence on public policy in Canada. They have brought new ideas into the public consciousness. They have expanded the vocabulary of politics, education and social science. They have added to the furniture that we now expect to find in Canada's storefront of ideas. And they have always had real importance in providing considered advice to governments. This is their primary function. But in recent years, Commissions of Inquiry have begun to take on a new function: that of opening up issues to public discussion, of providing a forum for the exchange of ideas.

Gerald E. LeDain, who headed the Royal Commission on the Non-Medical Use of Drugs, discussed this emerging function in a lecture delivered at Osgoode Hall Law School on March 15, 1972:

> It was our search for the issues and a general perspective, as well as a sense of social feasibility – what the society was capable of – that made us conduct the kind of hearings we did.... We were looking also for the range of attitudes and wanted to hear from those most deeply involved. These hearings made a deep impression on us. At times they were very moving. One of the things we discovered is that we need public opportunities for the exchange of views on vital issues. The hearings provided a public occasion for people to say things to each other that they had obviously never said before. I think that a public inquiry can respond to the need for some extension of the regular electoral process on the social level, a process in which the public can contribute to the identification and discussion of the issues. [*Law and Social Change*, edited by Jacob Ziegel, p.84]

The Law Reform Commission of Canada, in a working paper published earlier this year, enlarged upon this function of commissions of inquiry:

> Finally, as democratic as Parliament may be, there is still an important need in Canada for other means of expressing opinions and influencing policy-making – what Harold Laski called "institutions of consultation." There are, of course, the

> "traditional ways"; establishing pressure groups, giving speeches, writing to the newspaper, and so on. But these traditional means are not always adequate. Today the need for other avenues of expression and influence is often focussed in greater demands for *public participation*. Increased participation allows those individuals and groups to express their views to public authorities. It also provides more representative opinion to decision-makers, so as to properly inform them of the needs and wishes of the people. [Law Reform Commission, *Commissions of Inquiry*, p.15]

If commissions of inquiry have become an important means for public participation in democratic decision-making as well as an instrument to supply informed advice to government, it is important to consider the way in which inquiries are conducted and whether they have the means to fulfil their perceived functions. Given the interest the public has had in the Mackenzie Valley Pipeline Inquiry, it may be useful to say something about the way in which it was conducted.

The Inquiry's Mandate

The Mackenzie Valley Pipeline Inquiry was appointed to examine the social, economic and environmental impact of a gas pipeline in the Northwest Territories and the Yukon, and to recommend the terms and conditions that should be imposed if the pipeline were to be built. We were told that the Arctic Gas pipeline project would be the greatest project, in terms of capital expenditure, ever undertaken by private enterprise. We were told that, if a gas pipeline were built, it would result in enhanced oil and gas exploration activity all along the route of the pipeline throughout the Mackenzie Valley and the Western Arctic.

But the gas pipeline, although it would be a vast project, was not to be considered in isolation. The Government of Canada, in the Expanded Guidelines for Northern Pipelines (tabled in the House of Commons on June 28, 1972), made it clear that the Inquiry was to consider what the impact would be if the gas pipeline were built and if it were followed by an oil pipeline.

So the Inquiry had to consider the impact on the North of an energy corridor that would bring gas and oil from the Arctic to the mid-continent. In fact, under the Pipeline Guidelines, we had to consider two corridors, one corridor extending from Alaska across the Northern Yukon to the Mackenzie Delta, and a second corridor from the Mackenzie Delta along the Mackenzie Valley to Alberta.

The Inquiry, when it was established, was unique in Canadian experience because, for the first time, we were to try to determine the impact of a large-scale frontier project before and not after the fact. The Inquiry was asked to see what could be done to protect the North, its people and its environment, if the pipeline project were to go ahead.

Let me repeat the words of the Order-in-Council: social, environmental and economic impact. I dare say they conferred as wide a mandate upon the Inquiry as any government has ever conferred upon any Inquiry in the past. The merit in such a wide mandate is clear. Impacts cannot be forced into tidy subject compartments. The consequences of a large-scale frontier project inevitably combine social, economic and environmental factors. In my opinion a sound assessment could not have been made if the analysis of impact had been divided up, if, for instance, environmental impact had been hived off for separate analysis.

The Pipeline Application Assessment Group

Concurrently with the establishment of the Inquiry, the Government of Canada established a Pipeline Application Assessment Group. This group, headed by Dr. John G. Fyles of the Geological Survey of Canada, consisted of public servants seconded by the Department of Indian Affairs and Northern Development, the Department of Energy, Mines and Resources, and the Department of the Environment, and by the Governments of the Northwest Territories and the Yukon Territory, and others outside the public service, who were retained in a consultative capacity. The task of the group was to review the material filed by Arctic Gas, the consortium seeking to build the pipeline. In their initial filing, in March 1974, Arctic Gas deposited with the government 32 volumes of material amounting to thousands of pages of technical information. The Assessment Group spent eight months reviewing this material and prepared a report to assist the Inquiry and the National Energy Board in its work, as well as government departments and agencies. Once the Inquiry got under way, many members of the Assessment Group transferred to the Inquiry staff.

Environment Protection Board

I should also mention the Environment Protection Board. The precursors of Arctic Gas and Foothills funded a group of scientists and engineers, all of them men of the highest competence in their various fields, to provide an independent examination of the environmental impact of a gas pipeline from Prudhoe Bay through the Mackenzie Valley to Alberta. The group, known as the Environment Protection Board and headed by Mr. Carson Templeton of Winnipeg, a distinguished engineer, was provided with $3.5 million, and after four years of study, published a lengthy report that was, in many respects, critical of the Arctic Gas proposal.

The report of the Environment Protection Board was of great assistance to the Inquiry. The Board was an intervenor at the Inquiry, and its members and staff gave evidence.

The oil and gas industry was responsible for this innovation. The industry established the Board, funded it, and did not seek in any way to interfere with its work or to dictate what should appear in its report. This represents a new departure for private industry. The precedent was followed at the Alaska Highway Pipeline Inquiry by Foothills Pipe Lines (Yukon) Ltd., which established and funded a similar board of scientists and engineers, once again headed by Mr. Templeton.

The Board wrote a report for Foothills, the report was made public, and the members of the Board testified at the Inquiry.

Preliminary Hearings

Preliminary hearings were held soon after the establishment of the Mackenzie Valley Pipeline Inquiry. At that time, I wrote to Arctic Gas, the environmental groups, the native organizations, the Northwest Territories Association of Municipalities, the Northwest Territories Chamber of Commerce, the Government of the Northwest Territories and the Government of the Yukon. I advised them of my appointment, and asked them for any submissions they wished to make regarding the way in which the Inquiry should be conducted. In April 1974, I held hearings at Yellowknife, Inuvik and Whitehorse, and in May, at Ottawa, and again at Yellowknife in September. Thirty-seven submissions were made at the preliminary hearings. These were very useful: it became apparent that the environmental groups and the native organizations would require time to get ready for the main hearings, and that they, as well as the Northwest Territories Association of Municipalities and the Northwest Territories Chamber of Commerce, would require funds to prepare for and to participate in the hearings. It also became evident that rules would have to be laid down for the production of all the information in the possession of government, industry and other interested parties. I therefore issued rulings on these matters, which are reproduced in Appendix 2 of this volume.

Production of Studies and Reports

The Government of Canada gave the Inquiry the power to issue subpoenas to get the evidence it needed. We sought to ensure that all studies and reports in the possession of the pipeline companies and the other parties should be produced, so that no study or report bearing on the work of the Inquiry would be hidden from view. I ruled that each party – the pipeline companies, and each of the intervenors – would have to prepare a list of all of the studies and reports in their possession relating to the work of the Inquiry, and that the lists should be circulated among all the participants. The Government of Canada, of course, had in its possession many studies and reports relating to the work of the Inquiry. Commission Counsel was therefore made responsible for providing a list of them.

This procedure allowed any party to call upon any other party to produce a copy of any study or report that was listed. If a party were to refuse to produce a document, then an application could be made to the Inquiry for a subpoena. Of course, any claim of lawful privilege would have had to be considered by the Inquiry. All concerned cooperated: no one had to apply for a subpoena at any time during the Inquiry.

In recent years, the Government of Canada has carried out a multitude of studies through its Environmental-Social Committee, Northern Pipelines, Task Force on Northern Oil Development. These studies cost $15 million. The oil and gas industry has carried out studies on the pipeline that we were told cost something like $50 million. Our universities have been carrying on constant research on northern problems and northern conditions. It would have been no good to let all these studies and reports just sit on the shelves. Where these reports contained evidence that was vital to the work of the Inquiry, it was essential that they be opened and examined in public, so that any conflicts could be disclosed, and where parties at the Inquiry wished to challenge them, they had an opportunity to do so. It meant that opinions could be challenged and tested in public.

It also raised the quality of debate at the Inquiry. Arctic Gas supported their application with much detailed and valuable technical information and indeed with considerable original research. This material, together with the reports of the Pipeline Application Assessment Group, the Environment Protection Board and government studies, permitted the Inquiry to engage in a detailed analysis of issues – to get to the heart of matters as diverse as frost heave and the seasonal movements of marine mammals – rather than deal with them at the level of vague generalization.

As a consequence, all parties at the Inquiry had to be equipped to analyze all of this material and to be in a position to respond to technical questions arising from it. This raises the matter of funding intervenors.

Funding Intervenors

An inquiry of this scope has to consider many interests. If such an inquiry is to be fair and complete, all of these interests must be represented.

A funding program was established for those groups that had an interest that ought to be represented, but whose means would not allow it. On my recommendation, funding was provided by the Government of Canada to the native organizations, the environmental groups, northern municipalities, and northern business, to enable them to participate in the hearings on an equal footing (so far as that might be possible) with the pipeline companies – to enable them to support, challenge, or seek to modify the project.

These groups are sometimes called public interest groups. They represent identifiable interests that should not be ignored, that, indeed, it is essential should be considered. They do not represent the public interest, but it is in the public interest that they should be heard. I ruled that any group seeking funding had to meet the following criteria:

1. There should be a clearly ascertainable interest that ought to be represented at the Inquiry.

2. It should be established that separate and adequate representation of that interest would make a necessary and substantial contribution to the Inquiry.

3. Those seeking funds should have an established record of

concern for, and should have demonstrated their own commitment to, the interest they sought to represent.

4. It should be shown that those seeking funds did not have sufficient financial resources to enable them adequately to represent that interest, and that they would require funds to do so.

5. Those seeking funds had to have a clearly delineated proposal as to the use they intended to make of the funds, and had to be sufficiently well-organized to account for the funds.

In funding these groups, I took the view that there was no substitute for letting them have the money and decide for themselves how to spend it, independently of the government and of the Inquiry. If they were to be independent, and to make their own decisions and present the evidence that they thought vital, they had to be provided with the funds and there could be no strings attached. They had, however, to account to the Inquiry for the money spent. All this they have done.

Let me illustrate the rationale for this by referring to the environment. It is true that Arctic Gas carried out extensive environmental studies, which cost a great deal of money. But they had an interest: they wanted to build the pipeline. This was a perfectly legitimate interest, but not one that could necessarily be reconciled with the environmental interest. It was felt there should be representation by a group with a special interest in the northern environment, a group without any other interest that might deflect it from the presentation of that case.

Funds were provided to an umbrella organization – the Northern Assessment Group – that was established by the environmental group to enable them to carry out their own research and hire staff, and to ensure that they could participate in the Inquiry as advocates on behalf of the environment. In this way, the environmental interest was made a part of the whole hearing process. The same applied to the other interests that were represented at the hearings. The result was that witnesses were examined and then cross-examined not simply to determine whether the pipeline project was feasible from an engineering point of view, but to make sure that such things as the impact of an influx of construction workers on communities, the impact of pipeline construction and corridor development on hunting, trapping and fishing, and the impact on northern municipalities and northern business, were all taken into account.

The usefulness of the funding that was provided has been amply demonstrated. All concerned showed an awareness of the magnitude of the task. The funds supplied to the intervenors, although substantial, should be considered in the light of the estimated cost of the project itself, and of the funds expended by the pipeline companies in assembling their own evidence.

I do not suggest that the funding of intervenors is appropriate in all inquiries – that would depend on the nature of the inquiry. But I can speak to its usefulness in this instance.

Hearings

We sought to avoid turning the Inquiry into an exclusive forum for lawyers and experts. Unless you let outsiders in, an inquiry can become a private, club-like proceeding. This problem presents itself most acutely when you want to hear from the experts but when you want equally to hear from ordinary people who could be affected by the impact of the project.

It was inevitable that conflict would arise if the hearing process in which the public would be entitled to participate was the same as that at which the evidence of engineers, biologists, economists and so on, would be heard and cross-examined – a process necessitating the pre-eminent role of lawyers. That conflict had to be resolved. We therefore decided to hold two types of hearings: formal hearings and community hearings.

We decided to hold formal hearings at Yellowknife, where expert witnesses for all parties could be heard and cross-examined, and where the proceedings would, in many ways, resemble a trial in a courtroom. It was at Yellowknife that we heard the evidence of the experts: the scientists, the engineers, the biologists, the anthropologists, the economists – the people who have studied northern conditions and northern peoples.

The formal hearings began with an overview of the North. Commission Counsel presented a series of witnesses, all of them authorities in their fields, who discussed in a general way the geography, history, flora, fauna, and economy, of the Mackenzie Valley and the Western Arctic. For the Inquiry and the participants, this evidence provided a useful backdrop against which to place the detailed evidence that came later.

At the formal hearings, all the participants were represented: the two pipeline companies, the native organizations, the environmental groups, the Northwest Territories Association of Municipalities and the Northwest Territories Chamber of Commerce. All were given a chance to question and challenge the things that the experts said, and all were entitled, of course, to call expert witnesses of their own. Lawyers represented most of the participants. But non-lawyers acted as counsel for some groups, and quite effectively, too: Carson Templeton for the Environment Protection Board, Jo McQuarrie for the Northwest Territories Mental Health Association and David Reesor for the Northwest Territories Association of Municipalities.

At the same time, community hearings were held in each city and town, settlement and village in the Mackenzie Valley, the Mackenzie Delta and the Northern Yukon. We held hearings at 35 communities in the Mackenzie Valley and the Western Arctic. At these hearings, the people living in the communities were given the opportunity to speak in their

own language and in their own way. I wanted the people in the communities to feel that they could come forward and tell me what their lives and their experience led them to believe the impact of a pipeline and an energy corridor would be.

In this way, we tried to have the best of the experience of both worlds: at the community hearings, the world of everyday, where most witnesses spend their lives, and, at the formal hearings, the world of the professionals, the specialists, and the academics.

I appointed Michael Jackson, Special Counsel to the Inquiry, as Chairman of a Committee on Community Hearings. This Commmittee comprised representatives of each of the participants and it considered such matters as the timing of community hearings – (having regard, among other things, for the seasonal activities of northern people), the procedure to be adopted at such hearings, and the role of the participants and their lawyers.

One of the first matters the Committee had to deal with related to the issue of cross-examination of witnesses. The object of the community hearings was to give all people an opportunity to express their concerns without worrying about what they might well regard as harassment by lawyers. The Committee suggested a variety of ways in which the function of cross-examination could be fulfilled by procedures that would not dissuade people from testifying. One such technique was to invite representatives of both Arctic Gas and Foothills to make a presentation to the Inquiry whenever it appeared to them that people were misinformed or whenever they wished to correct what they felt was a mistaken view of their proposals. In this and other ways, without it ever being necessary formally to restrict the right to cross-examination, the community hearings were conducted, not within a procedural framework in which only lawyers felt comfortable, but within a framework which permitted northern people, native and white, to participate fully.

Many people in the communities of the North do not speak English, and could be understood only through interpreters. For them, the experience of testifying was sometimes strange and difficult, and we did not want to place any impediment at all in the way of their speaking up and speaking out. A fairly wide latitude was given. Even at the formal hearings, we did not insist upon a too rigid observance of legal rules of admissibility, for that might have squeezed the life out of the evidence. I see no difficulty in this. The reasons for insisting upon a strict observance of rules of evidence at civil or criminal trials, do not obtain at a public inquiry relating to questions of social, environmental and economic impact. What is essential is fairness and an appropriate insistence upon relevance.

In order to give people – not just the spokesmen for native organizations and for the white community, but all people – an opportunity to speak their minds, the Inquiry remained in each community as long as was necessary for every person who wanted to speak to do so. In many villages a large proportion of the adult population addressed the Inquiry. Not that participation was limited to adults. Some of the most perceptive presentations were given by young people, concerned no less than their parents about their land and their future.

I found that ordinary people, with the experience of life in the North, had a great deal to contribute. I heard from almost one thousand witnesses at the community hearings – in English (and occasionally in French), in Loucheux, Slavey, Dogrib, Chipewyan and in the Eskimo language of the Western Arctic. They used direct speech. They seldom had written briefs. Their thoughts were not filtered through a screen of jargon. They were talking about their innermost concerns and fears.

It is not enough simply to read about northern people, northern places and northern problems. You have to be there, you have to listen to the people, to know what is really going on in their towns and villages and in their minds. That is why I invited representatives of the companies that wanted to build the pipeline to come to these community hearings with me. Arctic Gas and Foothills sent their representatives to every hearing in every community.

The contributions of ordinary people were therefore important in the assessment of even the most technical subjects. For example, in Volume One, I based my discussion of the biological vulnerability of the Beaufort Sea not only on the evidence of the biologists who testified at the formal hearings, but also on the views of the Inuit hunters who spoke at the community hearings. The same is true of sea-bed ice scour, and of oil spills; they are complex, technical subjects but our understanding of them was nonetheless enriched by testimony from people who live in the region.

It became increasingly obvious that the issue of impact assessment is much greater than the sum of its constituent parts. For example, when North America's most renowned caribou biologists testified at the Inquiry, they described the life cycle, habitat dependencies and migrations and provided a host of details about the Porcupine caribou herd. Expert evidence from anthropologists, sociologists and geographers described the native people's dependency on caribou from entirely different perspectives. Doctors testified about the nutritional value of country food such as caribou, and about the consequences of a change in diet. Then the native people spoke for themselves at the community hearings about the caribou herd as a link with their past, as a present-day source of food and as security for the future. Only in this way could the whole picture be put together. And only in this way could a sound assessment of impact be made.

When discussion turned to issues relating to social and cultural impact, economic development, and native claims, the usefulness of obtaining the views of local residents was equally important. This was nowhere more apparent than in the consideration of native claims. At the formal hearings,

land use and occupancy evidence was presented through prepared testimony and map exhibits. There the evidence was scrutinized and witnesses for the native organizations were cross-examined by counsel for the other participants. By contrast, at the community hearings, people spoke spontaneously and at length of both their traditional and their present-day use of the land and its resources. Their testimony was often painstakingly detailed and richly illustrated with anecdotes.

The most important contribution of the community hearings was, I think, the insight it gave us into the true nature of native claims. No academic treatise or discussion, formal presentation of the claims of native people by the native organizations and their leaders, could offer as compelling and vivid a picture of the goals and aspirations of native people as their own testimony. In no other way could we have discovered the depth of feeling regarding past wrongs and future hopes, and the determination of native people to assert their collective identity today and in years to come.

We had not heard the native people speak with such conviction of these things in recent years. Thus it is not surprising that the allegation should have been made that the testimony given by the native people was not genuine, that in some fashion they had been induced to say things they did not believe. Of course, such allegations reflect a lingering reluctance to take the views of native people seriously when they conflict with our own notions of what is in their best interests. But the point is this: such allegations, advanced in order to discredit the leaders of the native organizations, lose their force when measured against the evidence of band chiefs and band councillors from every community in the Mackenzie Valley and the Western Arctic, and against the evidence of the hundreds of native people who spoke to the Inquiry. These allegations have not, indeed, been made by anyone who was at the community hearings.

From the beginning, it was clear that we were dealing with an issue of national interest and importance. The Order-in-Council establishing the Inquiry contemplated hearings in the provinces as well as in the northern territories. We received many requests from Canadians in the South who wished to have an opportunity to contribute to the debate. So we took the Inquiry to ten of the major cities of Canada, from Vancouver in the west to Halifax in the east. These hearings took approximately one month. Thus the Inquiry, and through it the government, was able to draw on the views of a multitude of ordinary Canadians.

The Media

The Inquiry faced, at an early stage, the problem of enabling the people in the far-flung settlements of the Mackenzie Valley and the Western Arctic to participate in the work of the Inquiry. When you are consulting local people, the consultation should not be perfunctory. But when you have such a vast area, when you have people of four races, speaking seven languages, how do you enable them to participate? How do you keep them informed? We wished to create an Inquiry without walls. And we sought, therefore, to use technology to make the Inquiry truly public, to extend the walls of the hearing room to encompass the entire North. We tried to bring the Inquiry to the people. This meant that it was the Inquiry, and the representatives of the media accompanying it – not the people of the North – that were obliged to travel.

At the same time, we made it plain to the media that we regarded them as an essential part of the whole process. We sought to ensure that they were given every opportunity to provide an account of what was being said by all parties at the Inquiry. We tried to counter the tendency, all too frequent in the past, to treat the work of a Commission of Inquiry as a private affair. So we invited the press, radio, television and film makers into the hearing room. They did not obtrude: this was a public inquiry. The things that were said were the public's business, and it was the business of the media to make sure that the public heard those statements. Of course, this approach cannot always be followed. Certainly in the case of a purely investigatory inquiry, where specific allegations of wrongdoing have been made, different considerations prevail.

The CBC's Northern Service played an especially important part in the Inquiry process. The Northern Service provided a crew of broadcasters who broadcast across the North highlights of each day's testimony at the Inquiry. Every day there were hearings, they broadcast both in English and in the native languages from wherever the Inquiry was sitting. In this way, the people in communities throughout the North were given a daily report, in their own languages, on the evidence that had been given at both the formal hearings and the community hearings. The broadcasts meant that when we went into the communities, the people living there understood something of what had been said by the experts at the formal hearings, and by people in the communities that we had already visited. The broadcasters were, of course, entirely independent of the Inquiry.

No one could be expected to understand all the intricacies of the pipeline proposal and its consequences, but so far as we could provide some understanding of the proposal and what it would mean to northerners, we attempted to do so. The media in a way served as the eyes and ears of all northerners, indeed of all Canadians, especially when the Inquiry visited places that few northerners had ever seen and few of their countrymen had even heard of.

Commission Counsel and Inquiry Staff

Commission Counsel, Ian Scott, Q.C. (who was assisted throughout by Stephen Goudge), took the position that he was independent, and free to test and to challenge the evidence of witnesses of all parties. In addition, he regarded it as his job to

ensure that all relevant evidence was assembled and presented to the Inquiry so that no vital area was left unexplored. He questioned witnesses in order to establish the content and implications of every theory of social, environmental and economic impact. To secure this objective, the Inquiry staff were largely under the direction of Commission Counsel. They were engaged in reviewing the evidence that was brought forward at the hearings, and in assembling the evidence to be presented to the Inquiry by Commission Counsel.

The corollary was, of course, that Commission Counsel and the Inquiry staff were not allowed to put their arguments privately to the Inquiry. I ruled that the recommendations the Inquiry staff wished to develop should be presented to the Inquiry by Commission Counsel at the formal hearings. This the staff did at the close of the formal hearings, when their 800-page submission was made public.

Ordinarily, the proposals of Commission Counsel would not have been made public in this way. However, I felt they should be made public so that all participants at the Inquiry would have the fullest opportunity to challenge, support, modify or ignore their proposals. This procedure has been followed by many regulatory tribunals in the United States and I think it is a good one. It gave the pipeline companies, the native organizations, the environmental groups, northern business and northern municipalities a chance to criticize the submissions that Commission Counsel put forward on behalf of himself and the Inquiry staff. I, of course, was not bound in any way by the proposals of Commission Counsel, any more than I considered myself bound by the proposals that any other participant made.

Assessment of Impact

One of the complaints made to the Inquiry by northerners from time to time was that there had already been a plethora of committees, task forces, hearings and reports into some at least of the questions that the Inquiry was examining. Indeed, we came across many of them. But each of these reports and studies had largely been confined to a narrow subject. This has been a major flaw in impact assessment. Each department of government has tended to examine the impact of any given proposal solely within the confines of its own departmental responsibilities. Until this Inquiry was appointed, there was no basis on which an overview of the impact of the pipeline project could be made.

There has been another flaw in assessment of impact. Typically, impact assessments have focused on the individual project, and have not taken into account the cumulative effect of the project and the developments that are associated with it or that may follow. In the past, this tendency has been evident in the North, so that even when departments collaborated on a study of impact, that study was unduly confined. This limitation, which distorts rather than enlightens, represents the worst aspect of conventional impact assessment. It also suggests the necessity for developing a methodology that is sufficiently comprehensive to encompass a wide range of variables, a variety of conflicting interests, and a realistic span of time.

If you are going to assess impact properly, you have to weigh a whole series of matters, some tangible, some intangible. But in the end, no matter how many experts there may be, no matter how many pages of computer printouts may have been assembled, there is the ineluctable necessity of bringing human judgment to bear on the main issues. Indeed, when the main issue cuts across a range of questions, spanning the physical and social sciences, the only way to come to grips with it and to resolve it is by the exercise of human judgment.

Inquiries and Government

A final word about the role of the Commission of Inquiry *vis-à-vis* the role of the Government, the role of the adviser *vis-à-vis* the role of the decision-maker. A Commissioner of Inquiry has – or ought to have – an advantage that Ministers and senior executives in the public service do not have: an opportunity to hear all the evidence, to reflect on it, to weigh it, and to make a judgment on it. Ministers and their deputies, given the demands that the management of their departments impose upon them, usually have no such opportunity.

A Commissioner of Inquiry is bound to take full advantage of these advantages, remembering that he must leave the final decision to those elected to govern. This is why I felt throughout the Inquiry that it would be wrong to take the evidence summarily or to arrive at a decision in haste. If you do that, you have lost the great advantage that the work of a Commission of Inquiry can offer to government. There are cases, such as the Alaska Highway Pipeline Inquiry, when (for reasons that were well understood) an inquiry must be carried out according to a deadline. But such cases are exceptional.

As the Law Reform Commission has said:

> In a parliamentary democracy, Parliament is supreme. There is no matter beyond the competence of the elected representatives of the people. Nor, because Parliament is democratic and representative, is there a forum better able or more qualified for debating and deciding policy questions confronting Canada.
>
> But for some tasks, the legislature may need and seek assistance. Parliament's strength is also its weakness; its political responsiveness to the current concerns of Canadians makes it difficult for legislators to grapple with complex problems that are not of immediate political concern and require considerable time for their solution.
>
> In politics, a day can be a lifetime. There are often no hours to devote to subtle but significant problems, requiring sustained inquiry and thought. The decision may ultimately rest with the legislature; but the legislature needs very good advice. [Law Reform Commission, *Commissions of Inquiry*, p. 14.]

Advisory commissions of inquiry occupy an important

place in the Canadian political system. They supplement in a valuable way the traditional machinery of government, by bringing to bear the resources of time, objectivity, expertise, and by offering another forum for the expression of public opinion.

All of this cost money. The Inquiry, by the end of fiscal year 1976-1977, cost $3,163,344. When this cost is added to the funds that were provided to the native organizations, the environmental groups, northern municipalities and northern business, which came to $1,773,918, you get a total expenditure of $4,937,262 in public funds. I should add that expenditures in the current fiscal year relating largely to preparation and publication of my report put this figure today over $5.3 million.

The work of the Inquiry took many months (the hearings began on March 3, 1975, and ended on November 19, 1976). It had to if the Inquiry was to be fair and complete. Nevertheless, the Inquiry was completed in good time. Volume One, which dealt with the broad issues of social, environmental and economic impact, and contained the basic recommendations of the Inquiry, was available to the Government on May 9 of this year. These basic recommendations appear on the whole to have been acceptable to the Government of Canada. If the assessment made by the Inquiry has prevailed in the minds of decision-makers, it is perhaps in considerable measure a result of the process of the Inquiry.

APPENDIX 2
Inquiry Documents

There are, of course, several documents that pertain to the Inquiry. It is impossible to reproduce them all here, so I have limited myself to the five most essential items.

The Order-in-Council appointed me as the Commissioner of this Inquiry and defined my mandate.

The letter from the Honourable Jean Chrétien referred the application of Canadian Arctic Gas Pipeline Limited, and the letter from the Honourable Judd Buchanan referred the application of Foothills Pipe Lines Ltd.

The Preliminary Rulings I and II set out the procedures and rules of conduct for the Inquiry.

CANADA

PRIVY COUNCIL · CONSEIL PRIVÉ

P.C. 1974-641

21 March, 1974

WHEREAS proposals have been made for the construction and operation of a natural gas pipeline, referred to as the Mackenzie Valley Pipeline, across Crown lands under the control, management and administration of the Minister of Indian Affairs and Northern Development within the Yukon Territory and the Northwest Territories in respect of which it is contemplated that authority might be sought, pursuant to paragraph 19(f) of the Territorial Lands Act, for the acquisition of a right-of-way;

AND WHEREAS it is desirable that any such right-of-way that might be granted be subject to such terms and conditions as are appropriate having regard to the regional social, environmental and economic impact of the construction, operation and abondonment of the proposed pipeline;

THEREFORE, HIS EXCELLENCY THE GOVERNOR GENERAL IN COUNCIL, on the recommendation of the Minister of Indian Affairs and Northern Development, is pleased hereby, pursuant to paragraph 19(h) of the Territorial Lands Act, to designate the Honourable Mr. Justice Thomas R. Berger (hereinafter referred to as Mr. Justice Berger), of the City of Vancouver in the Province of British Columbia, to inquire into and report upon the terms and conditions that should be imposed in respect of any right-of-way that might be granted across Crown lands for the purposes of the proposed Mackenzie Valley Pipeline having regard to

...2

(a) the social, environmental and economic impact regionally, of the construction, operation and subsequent abandonment of the proposed pipeline in the Yukon and the Northwest Territories, and

(b) any proposals to meet the specific environmental and social concerns set out in the Expanded Guidelines for Northern Pipelines as tabled in the House of Commons on June 28, 1972 by the Minister.

HIS EXCELLENCY THE GOVERNOR GENERAL IN COUNCIL is further pleased hereby

1. to authorize Mr. Justice Berger

(a) to hold hearings pursuant to this Order in Territorial centers and in such other places and at such times as he may decide from time to time;

(b) for the purposes of the inquiry, to summon and bring before him any person whose attendance he considers necessary to the inquiry, examine such persons under oath, compel the production of documents and do all things necessary to provide a full and proper inquiry;

(c) to adopt such practices and procedures for all purposes of the inquiry as he from time to time deems expedient for the proper conduct thereof;

(d) subject to paragraph 2 hereunder, to engage the services of such accountants, engineers, technical advisers, or other experts, clerks, reporters and assistants as he deems necessary or advisable, and also the services of counsel to aid and assist him in the inquiry, at such rates of remuneration and reimbursement as may be approved by the Treasury Board; and

(e) to rent such space for offices and hearing rooms as he deems necessary or advisable at such rental rates as may be approved by the Treasury Board; and

2. to authorize the Minister of Indian Affairs and Northern Development to designate an officer of the Department of Indian Affairs and Northern Development to act as Secretary for the inquiry and to provide Mr. Justice Berger with such accountants, engineers, technical advisers, or other experts,clerks, reporters and assistants from the Public Service as may be requested by Mr. Justice Berger.

HIS EXCELLENCY THE GOVERNOR GENERAL IN COUNCIL is further pleased hereby to direct Mr. Justice Berger to report to the Minister of Indian Affairs and Northern Development with all reasonable despatch and file with the Minister the papers and records of the inquiry as soon as may be reasonable after the conclusion thereof.

HIS EXCELLENCY THE GOVERNOR GENERAL IN COUNCIL, with the concurrence of the Minister of Justice, is further pleased hereby, pursuant to section 37 of the Judges Act, to authorize Mr. Justice Berger to act on the inquiry.

Certified to be a true copy

Assistant Clerk of the Privy Council

Minister
Indian and Northern Affairs

Ministre
Affaires indiennes et du Nord

Ottawa, Ontario KIA OH4
April 19, 1974

The Honourable Mr. Justice
T.R. Berger,
Law Court,
800 W. Georgia,
Vancouver 1, British Columbia.

Dear Mr. Justice Berger:

Further to your appointment as Commissioner to the Mackenzie Valley Pipeline Hearings, by Order-in-Council dated March 21, 1974, I wish formally to refer to you the application made to me on March 21, 1974 by Canadian Arctic Gas Pipeline Limited for grant of certain interests in certain lands in the Yukon and the Northwest Territories and for necessary authorization to construct, own, and operate a pipeline and connected works.

It is my understanding that you are now in receipt of the application and the Order-in-Council authorizing your appointment, and that you have initiated preparatory works in respect of the hearings.

I am pleased that you have accepted this responsibility as Commissioner, and I will look forward to your report. When I can be of assistance to you in this process, do not hesitate to get in touch with me.

Yours sincerely,

Jean Chrétien.

Minister
Indian and Northern Affairs

Ministre
Affaires indiennes et du Nord

July 4, 1975.

The Honourable Mr. Justice T.R. Berger,
Commissioner,
Mackenzie Valley Pipeline Inquiry,
Resources Building,
P.O. Box 2817,
Yellowknife, N.W.T. X0E 1H0

Dear Justice Berger:

By a letter dated April 19, 1974, my predecessor, the Honourable Jean Chrétien, formally referred to you, further to your appointment under Order-in-Council P.C. 1974-641, dated March 21, 1974, an application made on March 21, 1974, by Canadian Arctic Gas Pipeline Limited for grant of certain lands in the Yukon and Northwest Territories and for necessary authorization to construct, own, and operate a pipeline and connected works.

The Order-in-Council, which established your Inquiry, designated you to "inquire and report upon the terms and conditions that should be imposed in respect of any right-of-way that might be granted across Crown lands for the purpose of the proposed Mackenzie Valley pipeline.....".

By letter dated May 23, 1975, I advised you that I was sending, for your information, copies of applications in the same matter by Foothills Pipe Lines Ltd. and Alberta Gas Trunk Line (Canada) Limited in respect of a Grant of Interests in Territorial Lands.

I am of the opinion that these more recent applications, because of their smaller scale, would generally have a lesser social, environmental, and economic impact than the application by Canadian Arctic Gas Pipeline Limited which has been formally referred to you. As a consequence any terms and conditions that you may recommend should be imposed in respect of a right-of-way that might be granted across Crown lands for the purposes of the proposed Mackenzie Valley pipeline should have equal or lesser application to these applications than to the application of Canadian Arctic Gas Pipeline Limited. Nonetheless, there may be areas of significant difference between the two projects which would warrant you recommending quite different terms and conditions.

...2

It is, therefore, with these considerations in mind that I am now formally referring to you the applications of Foothills Pipe Lines Ltd. and Alberta Gas Trunk Line (Canada) Limited with a view to your examining any areas of significant difference and recommending appropriate terms and conditions thereto.

Yours sincerely,

Judd Buchanan.

Judd Buchanan.

Preliminary Rulings (I)

I was appointed by the Government of Canada by Order-in-Council dated March 21, 1974, to conduct an inquiry into the social, environmental and economic impact of the proposed Mackenzie Valley natural gas pipeline.

Canadian Arctic Gas Pipeline Limited have applied to the Minister of Indian Affairs and Northern Development under Section 19(f) of the Territorial Lands Act, R.S.C. 1970, c.T-6, for a right-of-way across crown lands in the Yukon and the Northwest Territories. They propose to build a pipeline up the Mackenzie Valley to bring natural gas from Prudhoe Bay in Alaska and from the Mackenzie Delta to markets in Canada and the United States. The Inquiry I am to carry out is authorized by Parliament under Section 19(h) of the Territorial Lands Act. I am to consider the social, environmental and economic impact regionally of the construction, operation and subsequent abandonment of the proposed pipeline in the Yukon and the Northwest Territories, and I am to consider as well the measures which Arctic Gas propose to take to meet the specific social and environmental requirements of the Expanded Guidelines for Northern Pipelines tabled in the House of Commons on June 28, 1972, and I am to report upon the terms and conditions that ought to be imposed in respect of any right-of-way that might be granted to Arctic Gas. It will be for the Government of Canada, on the recommendation of the Minister of Indian Affairs and Northern Development to decide whether to grant a right-of-way to Arctic Gas. It will be for the National Energy Board to determine whether or not to recommend the granting of a Certificate of Public Convenience and Necessity, and for the Government to decide, if such a recommendation is made by the National Energy Board, whether a Certificate should be granted.

Because this Inquiry is unique in Canadian experience, and because of my anxiety that the people of the North and all other Canadians with an interest in the work of the Inquiry should have every opportunity to be heard, and that the Inquiry itself should be thorough and complete, I held preliminary hearings in April and May [1974] in Yellowknife, Inuvik, Whitehorse and Ottawa, to hear submissions on the way the Inquiry ought to be conducted. I have decided to outline my views now on the procedure that we will follow in the Inquiry, and to indicate my views on the questions that were raised relating to the scope of the Inquiry.

The Timetable for the Inquiry

THE EL PASO PROPOSAL

Arctic Gas argued that this Inquiry should be expedited because the El Paso Natural Gas Company intends to apply to the Federal Power Commission in the United States for permission to construct a pipeline to bring natural gas from Prudhoe Bay across Alaska to Valdez, to be liquefied there and then tankered to California. El Paso has already intervened before the Federal Power Commission, where Arctic Gas's sister company, Alaskan Arctic Gas Pipeline Limited, has applied for permission to build a natural gas pipeline from Prudhoe Bay to the Yukon border. El Paso intends to oppose Alaskan Arctic Gas's application in those proceedings (El Paso has not so far sought to intervene in this Inquiry). It was said that if El Paso's proposal were to be approved by the United States authorities, then the economic viability of Arctic Gas's proposal to build a gas pipeline up the Mackenzie Valley intended to bring gas from Prudhoe Bay and the Mackenzie Delta to the United States and Canadian markets, would be jeopardized. So, it was urged, it is essential that this Inquiry be expedited.

My mandate is to conduct a fair and a thorough Inquiry. That must come first. I intend to give all those persons and organizations with an interest in the proposal made by Arctic Gas a fair opportunity to be heard. I will not diminish anyone's right to be heard, nor will I curtail this Inquiry so as to improve Arctic Gas's position in relation to the El Paso proposals in the United States.

But there will not be any undue delay. At the preliminary hearings, all interested parties offered their cooperation to the Inquiry, and indicated their desire to work with the Inquiry. I intend to hold them to that.

THE NATIONAL ENERGY BOARD

Some of the native organizations and some of the environmental organizations argued that this Inquiry should not proceed until the National Energy Board has completed its hearings. This is urged upon the ground that if the National Energy Board were to refuse to grant a Certificate of Public Convenience and Necessity, this Inquiry would be unnecessary.

But if it can be said that this Inquiry should wait upon the outcome of the National Energy Board Hearings, it could equally be said that the National Energy Board should wait upon the outcome of this Inquiry, since the terms and conditions that are laid down by the Minister as the result of this Inquiry may alter the basis upon which Arctic Gas seek a Certificate of Public Convenience and Necessity. How can the National Energy Board decide whether to grant a Certificate of Public Convenience and Necessity, and how can Arctic Gas be expected to proceed with their request for such, without knowing the terms and conditions under which Arctic Gas is entitled to the right-of-way (assuming the Minister decides to grant a right-of-way at all) which it must obtain if it is to go ahead with the pipeline? A recitation of these arguments reveals that the relationship between this Inquiry and the National Energy Board cannot be comprehensively defined at this stage. I do not think it has been shown that this Inquiry ought to wait until the National Energy Board has completed its hearings and made a recommendation to the Government, and the Government has acted upon it one way or the other, before getting under way.

In any event, this Inquiry is not just about a gas pipeline; it relates to the whole future of the North. I am bound to examine the social, economic and environmental impact of the construction of a gas pipeline in the North. But the Pipeline Guidelines do not stop there. They require that the impact of the pipeline should be considered in the context of the development of a Mackenzie Valley transportation corridor.

The influence of a gas pipeline in the development of a Mackenzie Valley transportation corridor and in moulding the social, economic and environmental future of the North will be enormous. The Pipeline Guidelines contemplate the development of a corridor up the Mackenzie Valley to enable the bringing of oil and gas to southern markets. This Inquiry has been established to ensure that the gas pipeline proposal is not considered in isolation. The Mackenzie River has been a transportation system for centuries, first for the native people, then for the white people. The Mackenzie Highway is already under construction, and already reaches beyond the junction of the Liard and the Mackenzie [rivers] at Fort Simpson. The Pipeline Guidelines envisage that, if a gas pipeline is built, an oil pipeline may follow, and that the corridor may eventually include a railroad, hydro-electric transmission lines, and telecommunications facilities. It would be a mistake to dismember the corridor envisaged by the Pipeline Guidelines, and to consider the gas pipeline in isolation.

It is for that reason that I think this Inquiry should not wait upon the outcome of the proceedings before the National Energy Board. This Inquiry, covering the social, environmental and economic impact of the pipeline proposal against the background of the corridor concept, ought to proceed. The Order-in-Council does not impose any restriction upon the commencement of this Inquiry, and I do not think I should impose one.

Hearings

I intend to visit the communities in the Mackenzie Valley, the Delta and the Yukon, likely to be affected by the construction of the pipeline. I intend to do this before the hearings begin. I intend to travel by myself. My visit will be designed to enable me to get to know the people and the way they live, and not to obtain evidence about the impact of the pipeline or their views on the pipeline; that will come later, at the hearings.

FORMAL HEARINGS

I think the formal hearings should begin with an overview of the Mackenzie Valley, the Delta, and the area across the Northern Yukon where the pipeline is to go. Commission Counsel will bring forward this evidence through witnesses called by him for the purpose. The overview evidence would include such matters as the history, culture and economy of the northern peoples; the geography and geological history of the Mackenzie Valley, the Delta and the Yukon; the climate; the geotechnical aspects of northern construction; terrain types, including permafrost; and resources, renewable and non-renewable.

After that the Inquiry will hear the evidence of Arctic Gas. Arctic Gas suggested at the preliminary hearings that they would simply offer formal proof of the material filed in support of their right-of-way application, and then offer their witnesses for cross-examination. That will not be good enough. I expect Arctic Gas to call as witnesses the people who prepared the material and who carried out the field work on which it is based. I expect Arctic Gas's witnesses to be examined in chief in the usual way, to delineate, explain and discuss the material filed, before cross-examination. I should also say that I expect Commission Counsel to examine in chief each of the members of the Assessment Group assembled by the Government of Canada with a view to a complete canvass of all relevant evidence that each of them has to give. The members of the Assessment Group, like the witnesses for Arctic Gas, will be subject to cross-examination. The same procedure will apply to witnesses called by any of the parties at the formal hearings.

COMMUNITY HEARINGS

I intend to hold hearings in each of the communities in the Mackenzie Valley, the Delta and the Yukon that are likely to be affected by the pipeline, to allow the people living in those communities to tell me their views about the proposed pipeline.

The native organizations have said that the formal hearings, at which evidence is to be called relating to the social, environmental and economic impact of the proposed line, should not take place until the community hearings have been completed. I think it would be a mistake to try to impose a rigid framework like that on the scheduling of the community hearings. The purpose of the hearings in the communities is to offer the people living there an opportunity to state in their own languages and in their own way their views about the gas pipeline and the development that it will inevitably bring in its wake.

If the community hearings are going to offer the native people the opportunity they deserve to consider the proposal made by Arctic Gas, the report of the Assessment Group, and the other evidence to be given at the formal hearings, and then to state their case, they ought not to be held before the formal hearings. Instead I think the community hearings ought to be held concurrently with the formal hearings. By that I mean that the Inquiry should break off the formal hearings from time to time to hold hearings in the communities, to ensure that the native people in the communities have an opportunity to answer whatever may be said by the witnesses called at the formal hearings about the social, environmental and economic issues relating to their communities. It seems to me that the people living in the communities will not have the means of knowing the full extent of the material gathered by Arctic Gas, or the means to study it, or to know its specific application to each community, unless the community hearings proceed concurrently with the formal hearings.

At the community hearings I also want to give the native people an opportunity to tell the Inquiry about the impact seismic lines and other kinds of industrial activity have had on the land, on wildlife and the environment, and their own opinions of the likely effect of the construction of the pipeline on the land, the wildlife and the environment. I am anxious that the native people should bring their whole experience before the Inquiry. I do not think they will get that chance if we hold the community hearings first and then go on to the formal hearings.

At the same time I want to make it plain that I do not intend to hold any community hearings until the people living in the communities have had the opportunity of informing and preparing themselves for them. I want to say also that I expect that native persons will be called as witnesses from time to time at the formal hearings. The native people should not be confined to the community hearings for the purpose of presenting their case.

It is my conviction that the formal hearings and the community hearings should be regarded as equally important parts of the same process, and not as two separate processes.

Practice and Procedure

I do not intend to lay down a comprehensive set of formal rules of practice and procedure. But I do want to deal with some of the issues that arose at the preliminary hearings.

INTERVENORS

All of the persons and organizations that made submissions at the preliminary hearings will have the right to intervene and to participate in the Inquiry. They will be notified when hearings are scheduled, and will be given an opportunity to present their submissions at the time and place most convenient to them.

As regards any other persons or organizations wishing to intervene in order to participate on a continuing basis in the hearings or merely to make a submission, advertisements will be placed in the newspapers throughout Canada, and announcements made over radio and television in the North, to notify any persons or organizations wishing to make submissions of the dates and places when they may do so, and prescribing the times within which their submissions, if in writing, should be sent to the Inquiry.

I expect that Arctic Gas, the native organizations, and the environmental organizations will participate in the formal hearings and the community hearings on a continuing basis. But that does not limit the right of any other intervenor to participate on a continuing basis. Every effort will be made by Commission Counsel to work out a timetable for the hearings in consultation with and with the cooperation of the intervenors.

REQUESTS BY THE ASSESSMENT GROUP FOR SUPPLEMENTARY INFORMATION AND MATERIAL

The Assessment Group will prepare, for the purposes of the Inquiry, requests to Arctic Gas for supplementary information and material relating to matters which the Pipeline Guidelines require Arctic Gas to include in their application for a right-of-way and which, in the view of the Assessment Group, have not been dealt with at all in the application, and information and material relating to matters where the Assessment Group is of the view that the application, though it deals with matters required by the Guidelines, does not in all respects come to grips with the requirements laid down by the Guidelines.

These requests will come to the Inquiry. Arctic Gas and the intervenors will be advised by the Inquiry of any request made by the Assessment Group for supplementary information and material, and the same procedure will be followed as regards the answers made by Arctic Gas to such requests. The requests and the answers will be made available to the public.

THE ASSESSMENT GROUP'S REPORT

The report or reports of the Assessment Group containing the Group's analysis of the material filed by Arctic Gas in support of their Application, will be filed with the Inquiry and copies will be made available to the intervenors and the public.

DISCOVERY

Commission Counsel will, in consultation with counsel for the intervenors, develop procedures for discovery of all studies and reports in the possession of the government of Canada as well as of Arctic Gas and the intervenors. Such material must, of course, be relevant to the Inquiry.

As I have said, I expect that at the hearings Arctic Gas, the native organizations and the environmental organizations will be represented throughout. All of them should be prepared to call witnesses early on to discuss in a general way the studies they have carried out and the reports they have prepared, on matters relating to the Inquiry. Commission Counsel will call appropriate witnesses from the public service for the same purpose. On cross-examination it should be possible to obtain complete discovery. Of course, any objections to the production of any studies or reports will be considered by the Inquiry.

SUBPOENAS

As the Inquiry proceeds, should it be necessary, I will exercise my power of subpoena. For the time being I do not intend to lay down any strict rules governing the exercise of that power.

Scope of the Inquiry

A number of arguments arose at the preliminary hearings regarding the scope of my terms of reference.

Let me say at once that the scope of this Inquiry is defined by the Order-in-Council and by the Pipeline Guidelines. Both the Order-in-Council and the Pipeline Guidelines are cast in broadly worded language. They say I am to conduct a social, economic and environmental impact study. It is a study whose magnitude is without precedent in the history of our country. I take no narrow view of my terms of reference.

I am going to indicate my views on the questions raised at the preliminary hearings regarding the scope of the Inquiry. But I am not in any way seeking here to delineate the whole configuration of the Inquiry; rather I am simply trying to settle some of the questions that were clearly present in many minds regarding the scope of the Inquiry.

NATIVE CLAIMS

The principal submission of the native organizations is that no pipeline development should proceed until the land claims of the native peoples have been settled. All of the native organizations that appeared at the preliminary hearings took the position that one of the terms and conditions that this Inquiry ought to recommend to the Minister of Indian Affairs and Northern Development is that there should be no right-of-way granted to Arctic Gas until the native land claims in the Yukon and the Northwest Territories have been settled.

It was suggested by Arctic Gas that the native people ought not to be allowed to advance such an argument in this Inquiry, on the ground it would not fall within my terms of reference to recommend the imposition of such a term or condition. The Order-in-Council says that I am "to inquire into and report upon the terms and conditions that should be imposed in respect of any right-of-way that might be granted across crown lands for the purposes of the proposed Mackenzie Valley pipeline. . . . " It is said that this Inquiry is limited by these words to the consideration of terms and conditions to be performed or carried out by Arctic Gas.

It is true that the Pipeline Guidelines contemplate that the terms and conditions that the Minister decides to impose upon the granting of a right-of-way shall be included in a signed agreement to be made between the Crown and Arctic Gas. But the Order-in-Council does not confine this Inquiry to a review of the Pipeline Guidelines and of the measures that Arctic Gas are prepared to take in order to meet them. The Order-in-Council requires that the Inquiry consider the social, economic and environmental impact of the construction of a pipeline in the North. That takes the Inquiry beyond the Pipeline Guidelines, and requires a consideration of what the native organizations say ought to be a condition precedent, to be imposed by the Government, as a matter of policy, quite apart from whatever provisions the Government may require, of Arctic Gas or of any other company wishing to build a pipeline, in a signed agreement for a right-of-way.

I am not saying whether the natives' position is well-founded or not. But it is one which they are entitled to urge upon this Inquiry. In fact, it seems to me that it provides an essential focus for the natives' case regarding the impact of the pipeline on their communities and their way of life. Indeed, I would go further. The case Arctic Gas intend to make is that the pipeline can be built without prejudice to the settlement of native land claims. The position taken by the natives offers a focus for the consideration of those terms and conditions – not only those that emerge from the Pipeline Guidelines, but also any others that Arctic Gas is ready to propose – that may enable the pipeline to be built without prejudice to native claims.

Notwithstanding the language of the Introduction to the Social Guidelines (in the Pipeline Guidelines) which appears to make some distinction between the Indian people and the Inuit and the Metis for purposes of settlement of their claims, I take the view that, so far as this Inquiry is concerned, there should be no distinction between the position of the native peoples. All of them are entitled to urge at this Inquiry that there should be no right-of-way granted until their claims have been settled.

THE CORRIDOR CONCEPT

It has been argued by Canadian Arctic Resources Committee that my terms of reference include any gas pipeline proposed by any applicant, and that this Inquiry should not be limited to the proposal that has been made by Arctic Gas. Arctic Gas, on the other hand, have argued that this Inquiry should be limited to an examination of the particular proposal to build a natural gas pipeline that Arctic Gas have made in their application to the Minister for a right-of-way under the Territorial Lands Act.

I do not think that this really gets me very far in ascertaining the limits of the scope of my terms of reference, because the Pipeline Guidelines clearly require an examination of Arctic Gas's proposed pipeline and the route it is to follow in the light of the corridor concept described in the Guidelines. The Pipeline Guidelines relate to the development of a Mackenzie Valley transportation corridor, and not simply to the construction of a gas pipeline.

In any event, the Pipeline Guidelines specifically require a comparison of the proposed pipeline route with alternative pipeline routes. In view of this, I do not think there is really any difference between an Inquiry into the impact of the pipeline proposed by Arctic Gas and an examination generally of the impact of the construction of a gas pipeline up the Mackenzie Valley. The purpose of the corridor, according to the Pipeline Guidelines, is to minimize social and environmental disturbance. It is in that connection that a comparison of the proposed pipeline route with alternate pipeline routes is relevant to this Inquiry.

I am also bound to consider the economic and social impact of the construction of an oil pipeline and to consider the combined effect of the construction of a gas pipeline and an oil pipeline in the corridor.

However, I am not prepared to consider the merits of alternate modes of transportation of the gas, except to the extent that an examination of the advantages and disadvantages of other forms of transportation will be of assistance in determining what terms and conditions ought to be imposed if a right-of-way is granted. For example, a comparison of the extent of environmental degradation that may accompany other modes of transporting the gas may be useful for the purpose of establishing what environmental standards ought to be laid down for the construction of a natural gas pipeline; or a comparison of the opportunities for northern employment that other modes of transportation may offer may be useful for the purpose of determining what terms and conditions ought to be imposed on Arctic Gas or any other pipeline company, in order to generate northern employment, if that is desirable. But such evidence must be relevant to the purposes of the Inquiry.

SUPPLIES AND EQUIPMENT

The purchase and transportation of supplies and equipment and material for the proposed gas pipeline clearly fall within the terms of reference of this Inquiry.

GATHERING LINES AND GAS FIELDS

Even though Arctic Gas has applied only for a right-of-way for the purpose of constructing a trunk pipeline, I regard it as essential to this Inquiry that I should consider evidence regarding the gas fields in the Delta and the gathering lines to be built in the Delta.

I realize that Arctic Gas will be a common carrier, and not a producer, and that the gathering lines will be built by the producers, and not by Arctic Gas. But these lines are so obviously a part of the pipeline system that any consideration of the impact of the gathering lines entails a consideration of the impact of the gathering lines.

But I am not saying that Arctic Gas must bear the burden of adducing this evidence. And I do not know whether the producers will intervene. So it will be the responsibility of Commission Counsel to obtain evidence, pursuant to subpoena if necessary, to enable this Inquiry to consider the location and extent of the gas fields in the Delta, the likely extent of further gas exploration in the Delta and the Beaufort Sea, the likely location, design and construction of the gathering lines and of the processing plants that will be needed to render the gas acceptable to the trunk pipeline, and the social, environmental and economic impact that the development of the gas fields and the construction of these lines will have in the Delta and elsewhere in the North.

PRODUCER REVENUES AND TAXATION

It was urged by Canadian Arctic Resources Committee that I should consider the revenue to the producers that would be generated by the construction of the proposed gas pipeline.

It was said that I should allow evidence to establish the propriety of imposing a term or condition on the construction of the gas pipeline that would require a part of the revenue from the production of gas in the Delta to be dedicated to the improvement of social services in the North. This is the same thing as saying that I ought to conduct an investigation into the income and profits likely to accrue to the producers by the development of the gas fields in the Mackenzie Delta and then make a determination regarding what would be a fair return to the public from the exploitation of the resource.

That lies beyond my terms of reference. The level of royalties and taxes to be imposed upon the gas producers in the Mackenzie Delta is a matter to be decided by Parliament. That is the place to go with arguments about the adequacy of the return to the Crown from the extraction of the gas.

ECONOMIC IMPACT

I do not intend to conduct an examination of the impact of a gas pipeline on the economy of Canada. I am, however, prepared to consider evidence that reveals the particular impact of a gas pipeline on the economy of the North.

It is impossible wholly to disentangle economic consequences from social and environmental consequences. For example, evidence regarding the quantity and quality of the gas in the Delta and the state of natural gas markets, will be of importance for the purpose of determining the life of the pipeline, and such things as the extent to which looping will occur and the number of compressor stations that will be needed. These relate to economic impact of the pipeline, but they relate as well to the social and environmental impact of the pipeline on the North.

But there will be evidence that relates essentially to economic impact. It must, however, be evidence designed to reveal the economic impact on the North. I am prepared to hear evidence of the effect of the gas pipeline on the rate of inflation, capital markets, the foreign exchange rate and other national economic indicators, to enable this Inquiry to ascertain the effect of the gas pipeline on the economy of the North. But such evidence will be allowed for that purpose only.

It was urged that it is impossible to segregate the impact upon the national economy from the impact upon the economy of the North. But the Order-in-Council provides that I am to have regard to the economic impact regionally of the gas pipeline proposal. I think that fixes the limits of the Inquiry. Whatever impact the construction of a gas pipeline may have on Canada's economy, I do not think that the Order-in-Council allows me to explore it. My mandate is to consider the regional economic impact of the pipeline proposals. That means that I am to consider the economic impact especial to the North, and not the economic impact on the nation as a whole.

GREAT BEAR HYDRO PROJECT

Canadian Arctic Resources Committee said that a study had been made by the Northern Canada Power Commission regarding the feasibility of building three dams on the Great Bear River for the purpose of providing hydro-electric power for the pumping stations on the pipeline. According to the evidence, these proposals proceeded on the basis that such hydro power would be produced more cheaply than the natural gas, and that the hydro power could therefore be used to pump the gas, with a consequent saving of natural gas in the operation of the pipeline. Given a customer whose energy requirements would be of such a magnitude, it would be feasible to proceed with the project, and to generate hydro-electric power for Arctic Gas and customers throughout the North.

Such proposals, as outlined to me, were sketchy and incomplete. However, if such a development were to occur, the impact it would have on Fort Franklin, not to mention the whole of the Mackenzie Valley, is obvious. It would constitute, in my view, an "associated and ancillary facility" within the meaning of the Pipeline Guidelines, and would clearly fall within this Inquiry. In any event, if it were built for the purpose of providing hydro-electric power to Arctic Gas, it would be necessary to consider its social, environmental and economic impact. It is obvious that it might be urged upon the Inquiry that a term or condition of the right-of-way would be that electricity generated by the project should be used to pump the gas, in order to conserve gas in the operation of the line, and to make possible the electrification of the Mackenzie Valley.

Should evidence come before me that indicates that such a project will be seriously considered if a right-of-way is granted and a Certificate of Public Convenience and Necessity follows, then I will hear evidence regarding the social , economic and environmental impact of the project.

These will be the limits of the Inquiry in the disputed areas. In concluding what they ought to be, I have been guided by the conviction that this Inquiry must be fair and it must be complete. We have got to do it right. The pipeline, if it is built, will have a great impact on the future of northern development and the shape of northern communities, and the way of life for northern peoples. Not simply because a pipeline is to be built, but because of all that it will bring in its wake. To limit the Inquiry to an examination of Arctic Gas's proposal merely, without considering the background against which that proposal is made, without considering the corridor concept indicated by the Pipeline Guidelines, would be to nullify the basis on which this Inquiry was established.

Issued: July 12, 1974, Yellowknife, Northwest Territories.

Preliminary Rulings (II)

Practice and Procedure

Mr. Scott, Commission Counsel, has presented certain proposals regarding practice and procedure. I held further preliminary hearings at Yellowknife on September 12 and 13, 1974, to consider representations regarding these proposals by counsel for Arctic Gas, counsel for the other participants who appeared, as well as by Commission Counsel. I also considered the submissions made in writing by other participants.

I said in my Preliminary Rulings of July 12, 1974, that I wanted this Inquiry to be fair and complete. I have had that consideration uppermost in mind in deciding upon these issues of practice and procedure. The Rulings I am handing down today are intended to bring about full disclosure of all the evidence, and to give to all concerned the fullest opportunity to present their case.

As soon as the Inquiry has received the report of the Assessment Group assembled by the Government of Canada to analyze the material filed by Arctic Gas in support of their application for a right-of-way, I will set a date for the commencement of the formal hearings of the Inquiry.

Application of the Rules

DEFINITION OF PARTICIPANT

Any person shall be deemed a participant if he appears at any formal hearing of the Inquiry (including preliminary hearings) and gives his name and address to the Inquiry, or if he advises the Inquiry in writing of his intention to appear. Special Counsel shall maintain a list of participants, which shall be available for inspection by any person at the offices of the Inquiry in Yellowknife and in Ottawa.

APPLICATION

These rules shall apply only to the following participants in the Inquiry:

Canadian Arctic Gas Pipeline Limited
Foothills Pipe Lines Ltd.
Canadian Arctic Resources Committee [1]
Environment Protection Board
Indian Brotherhood of the Northwest Territories
Metis Association of the Northwest Territories
Inuit Tapirisat of Canada
Committee for Original Peoples Entitlement
Yukon Native Brotherhood
Northwest Territories Association of Municipalities
Commission Counsel

[1] Mr. Anthony and Mr. Lucas, counsel for Canadian Arctic Resources Committee, have advised the Inquiry that the Northern Assessment Group that was established by Canadian Arctic Resource Committee, the Canadian Nature Federation, the Federation of Ontario Naturalists, Pollution Probe, and the Canadian Environmental Law Association, for purposes of this Inquiry, will comply with any Rules of this Inquiry applicable to Canadian Arctic Resources Committee.

These Rules will not apply to any other participants at the formal hearings.

These Rules will not apply to the community hearings.

Overview Hearings

Witnesses called at the overview hearings will not be cross-examined during the overview hearings, unless it is essential to a fair hearing. In any event, all overview witnesses will be subject to recall for further examination and for cross-examination at the formal hearings.

Formal Hearings

DIVISION OF FORMAL HEARINGS

The formal hearings will be divided into four phases.

Phase 1: Engineering and Construction of the Proposed Pipeline

This phase of the hearings will include such matters as the size of the pipeline, its location, the timing of construction, the composition and deployment of construction crews, and the construction of compressor stations.

Phase 2: The Impact of a Pipeline and Mackenzie Corridor Development on the Physical Environment

This phase of the hearings will include the impact on the land, the air and the water, and will cover such things as the effect on permafrost, river crossings, slope stability, and gravel and other borrow locations.

Phase 3: The Impact of a Pipeline and Mackenzie Corridor Development on the Living Environment

This phase of the hearings will include the impact on plant and animal life, including wildlife, mammals and fishes.

Phase 4: The Impact of a Pipeline and Mackenzie Corridor Development on the Human Environment

This phase of the hearings will include social and economic impact.

This division is for purposes of convenience only. The four phases will not necessarily encompass all of the evidence that will be brought forward at the formal hearings. Commission Counsel will therefore invite the participants to consult with him from time to time with a view to determining whether there should be any further division of the hearings within each phase. In any event, it will be open to any participant to call evidence out of order when that is appropriate.

Special Counsel will provide to each participant Notice of Hearing with respect to each of the four phases of the formal hearings and will advise the public generally of the matters to be considered at each phase of the formal hearings.

CALLING EVIDENCE AND EXAMINATION OF WITNESSES

At the formal hearings, as a general rule, Arctic Gas will lead their evidence first, followed by the other participants and Commission Counsel. Arctic Gas will be entitled to call evidence in rebuttal. From time to time, other participants will lead off; when they do, they will have the right to call evidence in rebuttal after the evidence for the other participants has been heard; in any event, the rights of all concerned to bring forward all their evidence on every issue will be preserved.

With respect to witnesses, counsel for any participant calling a witness will examine him in chief; the witness will then be cross-examined by counsel for each of the other participants and by Commission Counsel. Counsel for the participant calling the witness will be entitled to re-examine.

Commission Counsel will have the responsibility of calling the evidence of the members of the Assessment Group assembled by the Government of Canada, with a view to a complete canvass of all relevant evidence that the Group has to give. The Group will be subject to cross-examination.

Commission Counsel will also be responsible for calling the evidence of the public service of Canada not included in the Assessment Group, whose evidence is regarded as necessary to the completeness of the Inquiry.

It will also be the responsibility of Commission Counsel to obtain evidence, pursuant to subpoena if necessary, to enable the Inquiry to consider the location and extent of the gas fields in the Mackenzie Delta, the likely extent of further oil and gas exploration in the Delta and the Beaufort Sea, the likely location, design and construction of the gathering lines there and of the processing plants that will be needed to render the gas acceptable to the trunk pipeline, and the social, environmental and economic impact that the development of the gas fields and the construction of these lines will have in the Delta and elsewhere in the North.

All of the witnesses giving this evidence will be subject to cross-examination, and Commission Counsel will be entitled to re-examine each of them.

Evidence can be introduced through individual witnesses or panels of witnesses.

PLACE OF FORMAL HEARINGS

Yellowknife will be the main centre for the formal hearings. At the same time, I am anxious that as much as possible of the evidence relating to oil and gas activity in the Mackenzie Delta and the Beaufort Sea and relating to the impact of such activity should be heard at Inuvik.

It may be appropriate for some of the evidence at the formal hearings to be heard in Ottawa. In any event, it will be necessary in due course to hold hearings in major southern centres to enable Canadians who cannot appear in the North to express their views.

Community Hearings

Community hearings will be held in each community in the Mackenzie Valley, the Mackenzie Delta and the Yukon likely to be affected by the construction of a pipeline and by corridor development. I have appointed Professor Michael Jackson of the Inquiry staff to act as co-ordinator of the community hearings. He has established a committee, which consists of counsel representing the participants chiefly concerned with the organizing of the community hearings.

With regard to those communities that have a primarily native population, I expect that the native organizations will bring proposals to Professor Jackson's committee as to the way in which the hearings in those communities ought to be conducted. These proposals should be considered by the committee, and the committee's recommendations referred to me.

In the same way, with regard to those communities that have a primarily white population, I expect that the Northwest Territories Association of Municipalities will come forward with proposals regarding the conduct of those hearings and that they will be considered by Professor Jackson's committee and the recommendations of the committee referred to me.

If the committee does not reach agreement on any matter, I will consider the recommendations of each of its members. In any event, I will be prepared to consider the views of any participant regarding the conduct of the community hearings.

The Inquiry is arranging with the Canadian Broadcasting Corporation for summaries of the evidence given at the formal hearings to be broadcast to northern communities likely to be affected by the construction of a pipeline and the development of a Mackenzie Valley transportation corridor. The broadcasts will be on a regular basis, and will consist of summaries of the evidence given at the formal hearings. I expect that these broadcasts will be in English and in the native languages, so that the people in the communities will know what has been said at the formal hearings and will be able to respond to it when the Inquiry reaches the communities.

I should make it plain that I intend at the community hearings to give everyone who wishes to express his point of view, whether it is one widely held in the community or not, an opportunity to be heard.

Evidence Relating to Native Claims

I said, when I handed down my Preliminary Rulings on July 12, that it would be open to the native peoples in this Inquiry to argue that no right-of-way should be granted for a pipeline until their land claims were settled.

Native claims are based on traditional use and occupation. Evidence relating to current use and occupation will obviously include such things as the location of trap lines, fishing camps and hunting grounds, and berry picking areas. I want to hear from the trappers, hunters and fishermen and others in the native communities not only about their present use of the land and the extent of their reliance upon it, but also their views on the likely efficacy of any measures proposed by Arctic Gas to build a pipeline without damaging these native interests; by that I mean that I want to hear the evidence they have to give, and the representations they wish to make, regarding likely interference with trap lines, obstruction of streams, spoliation of hunting grounds and so on.

It seems to me that, in order to be fair to Arctic Gas, such evidence should be laid before the Inquiry, so that Arctic Gas will be in a position to indicate what terms and conditions they are prepared to submit to, what safeguards they are prepared to adopt, and what measures they are prepared to take, in support of their contention that a pipeline can be built without impairing the native people's current use and occupation of the land.

Now, such evidence would be of the first importance to this Inquiry even if the issue of native land claims had never been raised. That brings me to the problem of how to deal fairly with the contention of the native organizations that no pipeline should be built until their land claims have been settled. Their claims are based on traditional use and occupation and, according to Professor Cumming, senior counsel for the Inuit Tapirisat of Canada and the Committee for Original Peoples Entitlement, they include not only lands that are subject to current use and occupation, but extend to lands that they do not use and occupy today. Mr. Sutton, counsel for the Indian Brotherhood of the Northwest Territories and the Metis Association of the Northwest Territories, took the same position. So did Mr. Lueck, counsel for the Yukon Native Brotherhood.

How then can this Inquiry come to grips with a contention that no pipeline should be built until native land claims are settled, when those land claims relate to ancestral lands that the native people no longer use or occupy?

It is not for this Inquiry to decide the legitimate extent of native land claims in the North. But the native organizations have said to this Inquiry that no pipeline should be built until their land claims have been settled. Those who want to build the pipeline are entitled to an opportunity to meet this by showing that the pipeline can be built without prejudice to native land claims.

I think, therefore, that the native organizations should indicate the nature and extent of their land claims. Given that their view is that any settlement ought to acknowledge that the native people have certain rights that they should be entitled to assert in respect of the lands they claim, there should be some indication of the nature of the rights they assert and of their extent. (The land use studies being carried out by the native organizations relate, as I understand it, not only to land that is the subject of current use and occupation, but also to land that, although the native people no longer use or occupy it, they used to. These studies should be of real assistance to the Inquiry. Some of these studies are complete. Some are not yet complete. But, even where they are not complete, the work done so far may well be helpful.) The Inquiry will then be in a position to indicate to the Minister which measures ought to be taken to ensure that the native peoples, in their negotiations with the Government, do not find themselves at any disadvantage owing to the building of the pipeline, and, looking to the consummation of negotiations, which measures ought to be taken to ensure that, whatever the extent of the native interest that may ultimately be recognized by any settlement, it will not be diminished by the construction of the pipeline in the meantime.

It should, of course, be remembered that it will be for the Government of Canada and the native peoples to negotiate a

settlement of the native claims in the North. It is only the Government of Canada and the native peoples of the North that are parties to the negotiations to settle native land claims. Nothing said at this Inquiry can bind either side. Any delineation of native claims before the Inquiry will be for the purpose merely of ensuring that the Inquiry can fairly consider the principal contention of the native organizations regarding the construction of the pipeline and the answer that those who propose to build the pipeline have to make to that contention.

Discovery

DISCOVERY OF WITNESSES

Every participant shall, before giving evidence himself or calling witnesses on his behalf, file with Special Counsel, at least two weeks before giving evidence or calling such evidence, a synopsis of the evidence of the witness intended to be called, together with a list of any reports, studies or other documents to which that witness may refer or upon which he may rely.

This Rule was suggested by Commission Counsel to expedite the hearings. It will sometimes be difficult to comply with. If any participant cannot comply with the Rule, that will not necessarily preclude the calling of the witness in question, at the time the witness is presented to the Inquiry, but it may mean the witness will have to be recalled later on for cross-examination.

PRODUCTION OF STUDIES AND REPORTS

All of the participants, except Arctic Gas, expressed their willingness to provide a list of all studies and reports in their possession or power relating to the Inquiry, including those for which privilege might be claimed.

Mr. Goldie, counsel for Arctic Gas, was not prepared to go along with this. Instead, he suggested that, as each of the witnesses for Arctic Gas is called, there should simply be provided a list of all studies and reports that that witness relies upon, or that touch upon his testimony. It was said that this would be sufficient, and that it would be impracticable for Arctic Gas to provide a list of all their studies and reports before the formal hearings begin.

In my judgment, there is a paramount public interest in the fullest disclosure of all the facts, which requires that a list of all studies and reports in the possession or power of Arctic Gas relating to the Inquiry should be supplied to the Inquiry. It was not suggested that this would be impossible; it was simply urged that it would be difficult for Arctic Gas to comply with such a direction.

It would not be satisfactory for Arctic Gas merely to provide a list of studies and reports to accompany the testimony of each witness. If we were to proceed in that way, we would get the material only in a piecemeal fashion. If we do not require a complete list, there can be no guarantee that there will be full disclosure of all studies and reports prepared by Arctic Gas relating to the Inquiry. It would be open to Arctic Gas to decide for themselves which witnesses they ought to call and thus avoid the necessity of disclosing the existence of a study or a report that might be damaging to their case but that would be useful to the Inquiry. That will be avoided if a complete list is supplied.

I therefore direct that all of the participants to whom these Rules apply, including Arctic Gas, must provide a list of all studies and reports in their possession or power relating to this Inquiry. These lists should be filed with the Inquiry by November 30, 1974, and copies provided to all of the participants to whom these Rules apply. If they are ready earlier, they should be filed as soon as they are ready and distributed to the other participants; in fact, each participant may well decide to circulate a list of all studies and reports in its possession relating to Phase I of the Inquiry, without waiting until its list is ready covering all phases of the Inquiry. I appreciate that by November 30, 1974, some of the participants will not have completed all the studies and reports they intend to prepare. They should, nevertheless, file a list and add to it as they go along. Commission Counsel will be responsible for providing a list of all studies and reports of the Government of Canada.

When the lists have been provided, it will be open to the other participants to demand that any study or report on any list should be produced. If any participant wishes to raise a claim of privilege as the basis for an objection to production at that stage, the Inquiry will of course consider it then. It should be remembered that, under Section 19(f) of the Territorial Lands Act, R.S.C. 1970, c.T-6, any one appointed to conduct an inquiry has the power:

> for the purposes of the inquiry, to summon and bring before him any person whose attendance he considers necessary to the inquiry, examine such persons under oath, compel the production of documents and do all things necessary to provide a full and proper inquiry.

These powers have been conferred on this Inquiry by the Order-in-Council of March 21, 1974.

In addition, any participant may, in the meantime, request of any other participant a copy of any study or report whether or not it appears on the list filed by the participant of whom it is requested, and whether or not such a list has already been filed.

Applications to the Inquiry

Any applications made by participants to the Inquiry for subpoenas or any relief whatever shall be made upon reasonable notice to the Inquiry and to Commission Counsel as well as to any participant directly affected by the application and to any other participant that the Inquiry decides should be given notice of the application. If the

hearings are in progress, the application can be made to the Inquiry at the hearing on the day when it is returnable.

Changes in These Rules

The Inquiry retains the power to add to, alter or modify these Rules, or to require that any participant not already bound by them should comply with them in whole or in part, as well as the power to exempt any participant from complying with them in whole or in part.

Inspection by the Public

Copies of the material filed by any participant or other person or organization, including lists of studies and reports, the transcript of the hearings, and copies of the exhibits, will be on file during office hours, and available for inspection by the public at the Inquiry offices in Yellowknife and in Ottawa.

Issued: October 29, 1974, Yellowknife, Northwest Territories, and Ottawa, Ontario.

APPENDIX 3
Acknowledgements

In Volume One, I thanked all the people who contributed to the work of the Inquiry throughout its various phases: the witnesses, the participants, the pipeline companies, the oil and gas industry, native organizations, the environmental groups, northern municipalities, northern business, the territorial governments, the various departments of the federal government, and the Inquiry staff. The spirit of cooperation and the sharing of knowledge, experience and understanding became hallmarks of the Inquiry process.

The Inquiry continued to receive the full support and cooperation from the Department of Indian Affairs and Northern Development and, as a result, has been able to discharge its mandate completely. I am particularly indebted to the support given me by the Ministers responsible for the Department: The Honourable Jean Chrétien under whom the Inquiry was established, the Honourable Judd Buchanan who succeeded Mr. Chrétien, the Honourable Warren Allmand to whom Volume One was submitted, and the Honourable Hugh Faulkner to whom this volume is addressed.

I wish to extend special thanks to the following persons who have contributed to the publication of Volume Two and who have carried the Inquiry to its conclusion.

Consultants:

Frank Basham, George Braden, Hugh Brody, Jim Cameron, Edward Chamberlin, P.K. Chatterji, Steve Goudge, Christopher Hatfield, Ray Haynes, Joan Hornal, Michael Jackson, Rolf Kellerhals, Steve Merrett, Graham Morgan, Ron Pritchard, Peter Usher.

Technical Staff and Public Service Advisors:

John Fyles (Head); Ed Weick (Socio-economic Advisor), Don Gamble (Engineering and Environmental Advisor), Bruce Amos, Larry Burgess, Janice Falls, Sam Gelman, Daphne Greenwood, Julian Hawryzsko, Alan Heginbottom, Fred McFarland, Sheila Meldrum, Dick Morlan, Mary Mussell.

Report Editing:

Rosemary Wallbank; Heather Boucher, Alan Cooke

Report Production:

Shirley Callard; Donna Agostino, Carolyn Bennett, Pauline Boudrault, Linda Bradley, Ruth Carriere, Pat Clement, Patricia Fournier, Terry Kelly, Lorraine Lafontaine, Lise Lavertue, Paul Rowan, Barbara Smith, Mark Thibeault, Kerry Tindle, Annette Whyte.

Report Translation:

Brian Peters; Richard Gratton, Pierre Guérin, Louise Morrison, Michèle Wilson.

Report Publication:

André Lamothe (Printing), Bob Russell (Alphatext), Byrne Scott (Printing), Ken Slater (Design).

All the views expressed and all of the judgments made in this report are my own and for them I bear complete responsibility.

Photographs and Diagrams

Photographs on Cover

Front cover, clockwise from top right:

Snowmobiles at Holman Island (E. Weick); Muskrat skips on stretch boards (R. Fumoleau); White Whales (R. McClung); Caribou on snow field (IDS–G. Calef); Welding pipe (Arctic Gas); Teddy Tsetta of Detah (R. Fumoleau).

Back cover:

Drill rig on artificial island, Beaufort Sea (J. Inglis); Hunter on arctic sea ice (G. Bristow).

Title page, top left:

Dogrib woman testifying (M. Jackson);

Top right:

Yellowknife formal hearing (D. Gamble);

Centre:

Hearing at Rae (M. Jackson).

Photographs in text

Part One:

Hide being stretched and dried (R. Fumoleau).

Part Two:

Northern landscape (DIAND Yellowknife—B. Braden).

Part Three:

Pipe being laid in ditch (Alyeska).

Part Four:

Loucheux child at Old Crow (G. Calef).

Photography

The photography appearing in this report was made possible through the cooperation of the following organizations and photographers.

Alyeska Pipeline Service Company, Anchorage, Alaska.

Bill Braden, Department of Indian Affairs and Northern Development, Yellowknife, NWT.

Gary Bristow, Holman, NWT.

George Calef, Yellowknife (formerly with Interdisciplinary Systems Ltd. (IDS), Winnipeg).

Canadian Arctic Gas Pipeline Limited, Toronto.

René Fumoleau, Yellowknife.

Don Gamble, Ottawa.

Julian Inglis, Department of Indian Affairs and Northern Development, Ottawa.

Michael Jackson, Vancouver.

R. McClung, Fisheries and Marine Service, Department of the Environment, Ste. Anne de Bellevue, Quebec.

E.R. Weick, Ottawa.

Maps

Colour map:

Surveys and Mapping Branch, Department of Energy, Mines and Resources.

Renewable Resources map:

Geological Survey of Canada, Department of Energy, Mines and Resources.

Northern Conservation Areas map:

Alan Heginbottom, Ottawa.

APPENDIX 4
Terminology and Bibliography

Terminology

Throughout this report I have referred to the land claims of the native people as *native claims*.

Often I have referred to native people meaning all of the people of Eskimo and Indian ancestry, whether they regard themselves as Inuit, Dene or Metis. They are, of course, distinct peoples, yet they have an identity of interest with respect to many of the issues dealt with in this report and have often, in such instances, been referred to collectively as *native people*. Where only one of these peoples is meant, that is apparent from the text.

I have usually referred to present-day Eskimo peoples as Inuit; this is in keeping with their wishes today. Although many people of Eskimo ancestry of the Mackenzie Delta call themselves *Inuvialuit*, I have referred to them also as Inuit.

The term *Dene* refers to the status and non-status people of Indian ancestry who regard themselves as Dene. Native people who describe themselves as Metis and who see themselves as having a distinct history and culture, as well as aspirations and goals that differ from those of the Dene, I have referred to as Metis. I have dealt with the people of Old Crow separately because they live in the Northern Yukon, not in the Northwest Territories.

I have referred to the Mackenzie Valley and the Western Arctic. There is of course some overlap here, in that both geographical areas may be regarded as encompassing the Mackenzie Delta. The Mackenzie Valley includes the whole of the region from the Alberta border to the Mackenzie Delta, including the Great Slave Lake and Great Bear Lake areas. The Western Arctic encompasses the whole area on the rim of the Beaufort Sea, including the arctic coast of the Yukon.

I have referred to witnesses by their first name and surname when their names first appear, and thereafter by their surname only, except where the repetition of the first name is essential to avoid confusion. I have given the appellation "Mr." only to Ministers of the Crown. I have referred to witnesses holding doctorates as "Dr."

I have referred to government officials, the leaders of native organizations, band chiefs and others, by the offices they held when they gave evidence to the Inquiry.

I have often referred to *whites* and to the *white man*. It will be apparent that sometimes I mean western man and the representatives of the industrial system. Of course, in such a context the expression *white man* can, in fact, include people of many races. However, the native people throughout the Inquiry referred to the white man. They knew what they meant, and although they no doubt adopted the expression because the representatives of the larger Canadian society who come to the North are almost entirely Caucasian, they have not been inclined to make any finer differentiation. I think the phrase is not at all misleading under these circumstances. The alternative, which I have rejected, would be constantly to use such expressions as *non-native, southern* or *Euro-Canadian*. Instead, I have used these latter expressions where, in the context, no other would do.

Unless I have indicated otherwise, the term *the North* refers to the Northwest Territories and the Yukon Territory. *The South* generally refers to metropolitan Canada.

I have used the expression *we* many times. I have meant by it the non-native population of Canada, north and south, and have sought merely to remind readers that I view the North as one who shares the culture, perceptions and ideas of Canadians as a whole.

Throughout the report, Canadian Arctic Gas Pipeline Limited is referred to as Arctic Gas and Foothills Pipe Lines Ltd. as Foothills. I have treated each of these informal terms as plural, recognizing that groups of companies are involved.

Since the release of Volume One, the Arctic Gas proposal has been rejected by the National Energy Board and by the Government of Canada. So I have proceeded, in Volume Two, on the assumption that a pipeline may be expected to be built from the Mackenzie Delta along the Mackenzie Valley to the Northwest Territories–Alberta border in ten years' time. The reference to "the Company" in Volume Two is a reference to the company or consortium that may advance new pipeline proposals in the future. "The Agency" refers to the regulatory

authority that may be established by the federal government to supervise the construction of a Mackenzie Valley pipeline.

I recognize that some people will attach great importance to my use of the words shall and should. In the context of the hundreds of recommendations made in this report, I do not make a great distinction between the two. In general, however, I use "shall" where I feel the subject matter is particularly important. Most of these recommendations apply to the pipeline Company. I use "should" where I consider an issue needs attention and perhaps further definition. Many of my recommendations that apply to government use the word "should."

Bibliography

The following bibliographic references refer to documents and personal communications cited or used in both Volumes One and Two of my report. The bibliography is divided into two sections. The first lists, in alphabetical order by author, all material exclusive of existing legislation. Legislation is listed separately in the second section. The applications of Canadian Arctic Gas Pipeline Limited and of Foothills Pipe Lines Ltd. are given only one entry in the bibliography; the various submissions and amendments are not listed separately.

Where transcripts of the Inquiry hearings are cited, they are identified by the page number preceded by F (formal hearings) or C (community hearings). The Inquiry exhibits are similarly cited with the exhibit number preceded by F or C. The bibliography does not contain a reference to the transcripts, nor does it list all the exhibits received by the Inquiry. The transcripts and the exhibits form the Public Record and are located in the Public Archives, Ottawa.

Aboriginal Land Rights Commission. *Aboriginal Land Rights Commission Report*. Mr. Justice A.E. Woodward, Commissioner. Sydney, Australia, 1974.

Advisory Committee on Marine Resources Research and International Associaton for Biological Oceanography. "Indices for Measuring Responses of Aquatic Ecological Systems to Various Human Influences." *Fisheries Technical Paper*, No. 151. n.p., 1976.

Agreement in Principle Between the Dene Nation and Her Majesty the Queen, in Right of Canada. n.p., 1976.

Alaska Department of Health and Social Services. "Pipeline Impact – Copper Valley Basin, Alcohol Abuse and Alcoholism." Juneau, Alaska, 1974.

American Petroleum Institute. *Standard 650, Welded Steel Tanks for Oil Storage*. 6th edition. Washington, D.C., 1977.

American Public Health Association, *et al. Standard Methods for Examination of Water and Wastewater*. 14th edition. Washington, D.C., 1976.

The Arctic Institute of North America. "Alaska in the 70's, A Conference Report on Alaskan/Canadian Relationships." Montreal, 1976.

Arnold, Robert D. *Alaska Native Land Claims*. Anchorage: Alaska Native Foundation, 1976.

Asch, Michael. "Addendum to the Submission of Michael Asch, May 1976." Evidence presented on behalf of the Indian Brotherhood of the Northwest Territories to the Mackenzie Valley Pipeline Inquiry, Yellowknife, 1976.

———. "Past and Present Land-Use by Slavey Indians of the Mackenzie District." Evidence presented on behalf of the Indian Brotherhood of the Northwest Territories and Metis Association of the Northwest Territories to the Mackenzie Valley Pipeline Inquiry. Yellowknife, 1976.

———. Personal Communication with Peter J. Usher. June 3, 1977.

Attwood, D., *et al. Human Factors, Assessment of the Voyageur ACV in Canadian Coast Guard Marine Applications*. Department of National Defence, Defence Research Board, DCIEM Operational Report No. 73-OR-997. Ottawa, 1973.

Bailey, B.E. *Marine Oils with Particular Reference to those of Canada*. Fisheries Research Board of Canada, Bulletin No. 59. Ottawa, 1952.

Banfield, A.W.F. *The Mammals of Canada*. Second printing. Toronto: University of Toronto Press, 1977.

Barber, L. "The Basis for Native Claims in Canada." Address to the Rotary Club. Yellowknife, October 1974.

Barry, T.W. "Concerns for Birdlife During Oil and Gas Development." Evidence presented on behalf of the Committee for Original Peoples Entitlement to the Mackenzie Valley Pipeline Inquiry. Inuvik, 1976.

Battelle Memorial Institute. *Control of Spillage of Hazardous and Polluting Substances*. Report No. 15090 POZ10/70. n.p.: United States Government Printing Office, 1970.

Beard, Leo R. "Hypothetical Floods," *Hydrologic Engineering Methods for Water Resources Development*. The Hydrologic Engineering Center, Corps of Engineers, United States Army, Vol. 5. Davis, California, 1975.

Beauchamp, Kenneth P. *Land Management in the Canadian North.* Canadian Arctic Resources Committee. Ottawa, 1976.

Bell, Glen. "Fort Franklin Land Use Map." Evidence presented on behalf of the Indian Brotherhood of the Northwest Territories/Metis Association of the Northwest Territories to the Mackenzie Valley Pipeline Inquiry. Fort Franklin, 1975.

———. "Fort McPherson Land Use Map." Evidence presented on behalf of the Indian Brotherhood of the Northwest Territories/Metis Association of the Northwest Territories to the Mackenzie Valley Pipeline Inquiry. Fort McPherson, 1975.

———. "Fort Norman Land Use Map." Evidence presented on behalf of the Indian Brotherhood of the Northwest Territories/Metis Association of the Northwest Territories to the Mackenzie Valley Pipeline Inquiry. Fort Norman, 1975.

———. "Hay River Land Use Map, and List of Trappers." Evidence presented on behalf of the Indian Brotherhood of the Northwest Territories/Metis Association of the Northwest Territories to the Mackenzie Valley Pipeline Inquiry. Hay River, 1975.

Berger, Thomas R. "The Mackenzie Valley Pipeline Inquiry." Reprint from *Queen's Quarterly*, Vol. 83, No. 1 (1976).

Bissett, Don. *Resource Harvests — Hunter-Trappers in the Mackenzie Valley.* Environmental-Social Committee, Northern Pipelines, Task Force on Northern Oil Development, Report No. 74-42. Ottawa, 1974.

Blondin, Gina, *et al.* "Brief Presented to Mr. Justice Thomas Berger, Mackenzie Valley Pipeline Inquiry." Mackenzie Valley Pipeline Inquiry Submission on the Merits No. 189. n.p., [1976].

Brackel, W.D. *Socio-economic Importance of Marine Wildlife Utilization.* Beaufort Sea Project, Technical Report No. 32, Department of the Environment. Victoria, 1977.

Brewer, Max C. "Land Commitments in Alaska." *Arctic*, Vol. 28, No. 4 (1975), pp. 263-74.

Brody, Hugh. *Indians on Skid Row, The Role of Alcohol and Community in the Adaptive Process of Indian Urban Migrants.* Northern Science Research Group, Department of Indian Affairs and Northern Development. Ottawa, 1971.

———. "Paper 1: An Overview." Evidence presented on behalf of the Committee for Original Peoples Entitlement to the Mackenzie Valley Pipeline Inquiry. Yellowknife, 1976.

———. "Paper 2: Alcohol." Evidence presented on behalf of the Committee for Original Peoples Entitlement to the Mackenzie Valley Pipeline Inquiry. Yellowknife, 1976.

———. "Paper 3: Industrial Impact." Evidence presented on behalf of the Committee for Original Peoples Entitlement to the Mackenzie Valley Pipeline Inquiry. Yellowknife, 1976.

———. *The People's Land, Eskimos and Whites in the Eastern Arctic.* Middlesex: Penguin Books Ltd., 1975.

Brown, B.L. Letter to Mr. Justice Thomas R. Berger concerning "Northern Manpower Delivery System," dated January 14, 1977. Canadian Pipeline Advisory Council.

Buchanan, Honourable Judd. "Notes for a Speech by the Honourable Judd Buchanan, P.C., M.P., Minister of Indian and Northern Affairs to the Northwest Territories Council." Yellowknife, 1976.

Calef, George W. "The Urgent Need for a Canadian Arctic Wildlife Range." *Nature Canada*, Vol. 3, No. 3, (1974), pp. 3-11.

Calef, George W., *et al.* "The Reaction of Barren-Ground Caribou to Aircraft." *Arctic*, Vol. 29, No. 4 (1976), pp. 201-12.

Cameron, James. "Comments on: Mackenzie Valley Pipeline Inquiry, Volume II: Terms and Conditions — Wastewater" and covering letter to D.J. Gamble. Northern Technology Centre, Department of the Environment, Edmonton, 1977.

Canada. *Clean Air Act, 1974. Ambient Air Quality Objectives.* Canada Gazette Part II, Vol. 108, No. 11.

———. *Clean Air Act, 1975. Ambient Air Quality Objectives,* No. 2. Canada Gazette Part II, Vol. 109, No. 3.

Canada, Advisory Commission on the Development of Government in the Northwest Territories. *Report of the Advisory Commission on the Development of Government in the Northwest Territories.* A.W.R. Carrothers, Chairman. Ottawa, 1966.

Canada, Canadian Inter-governmental Beaufort Sea Contingency Planning Task Force. "Government Contingency Plan for Major Oil Spills in the Beaufort Sea." Final draft. Ottawa, 1976.

Canada, Commission of Inquiry into the Non-Medical Use of Drugs. *Final Report of the Commission of Inquiry into the Non-Medical Use of Drugs.* G.E. LeDain, Chairman. Ottawa, 1973.

Canada, Department of Indian Affairs and Northern Development. *Canada's National Wildlife Policy and Program.* A statement made by the Minister of Northern Affairs and National Resources in the House of Commons on April 6, 1966. Ottawa, 1966.

———. *Expanded Guidelines for Northern Pipelines*, as tabled in the House of Commons June 28, 1972 by the Honourable Jean Chrétien. Environmental-Social Committee, Northern Pipelines, TAsk Force on Northern Oil Development, Report No. 72-73. [Ottawa, 1972.]

———. *Mackenzie Valley Pipeline Inquiry, Summaries of Proceedings*. 6 vols. Ottawa, 1976.

———. *Report of the Task Force Formed to Study Problems Encountered by Northern Businessmen in Obtaining Federal Contracts*. n.p., 1975.

———. *Statement of the Government of Canada on Northern Development in the 70's*. Presented to the Standing Committee on Indian Affairs and Northern Development by the Honourable Jean Chrétien, Minister of Indian Affairs and Northern Development on March 28, 1972. Ottawa, 1972.

———. "Territorial Quarrying Regulations." Preliminary 6th Draft, [Ottawa, 1977.]

Canada, Department of Indian Affairs and Northern Development, National and Historic Parks Branch. *Byways and Special Places*. n.p., n.d.

Canada, Department of Indian Affairs and Northern Development, Northern Economic Development Branch, Economic Staff Group and MPS Associates Ltd. *Regional Impact of a Northern Gas Pipeline*. 7 vols. Environmental-Social Committee, Northern Pipelines, Task Force on Northern Oil Development, Reports Nos. 73-28 to 73-34. Ottawa, 1973.

Canada, Department of Indian Affairs and Northern Development, Parks Canada. *National Parks Policy*. Ottawa, 1975.

———. *National Parks System Planning Manual*. [Ottawa, 1972.]

———. *A National Wild Rivers System Proposal*. [Ottawa], 1974.

———. *Natural Areas of Canadian Significance — A Preliminary Study*. [Ottawa], 1977.

———. *Possible Applications of Historic Waterways to the Mackenzie River*. Byways and Special Places Program. [Ottawa], 1974.

Canada, Department of Indian Affairs and Northern Development, Special Staff Group on Northern Employment and Economic Opportunities. *Development Agencies for the Northwest Territories*. [Ottawa, 1973.]

Canada, Department of Industry, Trade and Commerce. *Visit to USSR of a Group of Canadian Experts Representing the Pipeline and the Production and Processing Sub-Groups of the Gas Working Group of the Soviet Canadian Mixed Commission on Industrial Application of Science and Technology*. Ottawa, 1975.

Canada, Department of National Health and Welfare, Health Protection Branch, Non-Medical Use of Drugs Directorate, Research Bureau. *Alcohol Problems in Canada: A Summary of Current Knowledge*. Technical Report Series No. 2. Ottawa, 1976.

Canada, Department of National Health and Welfare, Northern Health Service. *Report on Health Conditions in the Northwest Territories*. n.p., 1970 to 1974.

Canada, Department of National Health and Welfare, Nutrition Canada. *Nutrition, a National Priority*. Ottawa, 1973.

Canada, Department of the Environment, Environmental Protection Service. *Code of Good Practice for Handling Solid Wastes at Federal Establishments*. n.p., n.d.

———. *Code of Good Practice for Management of Hazardous and Toxic Wastes at Federal Establishments*. n.p., 1977.

———. *Code of Good Practice on Dump Closing or Conversion to Sanitary Landfill at Federal Establishments*. n.p., n.d.

———. *Guidelines for Effluent Quality and Wastewater Treatment at Federal Establishments*. Report EPS-1-EC-76-1. n.p., 1976.

———. *Petroleum Refinery Effluent Regulations and Guidelines*. Report EPS-1-WP-74-1. n.p., 1974.

———. *Proposed National Ambient Air Quality Objectives*, Part I. August 7, 1976. n.p., 1976.

———. *Recommended Environmental Standards for the Design and Construction of a Mackenzie Valley Gas Pipeline*. Report EPS-1-NW-76-1. n.p., 1976.

Canada, Department of the Environment, Fisheries and Marine Service. *Guidelines Concerning Applications to Remove Gravel From or Adjacent to Streams Frequented by Fish*. n.p., n.d.

———. "Intake Screen Guidelines (1972)." Vancouver, 1972.

Canada, Department of the Environment, Water Quality Branch. *Water Quality Data Report*. Computer printout of data stored in NAQUADAT system, for chemical and physical analysis of water of rivers in the Mackenzie Valley drainage basin, 1965 to 1977. Ottawa, 1977.

Canada, Law Reform Commission of Canada. *Commissions of Inquiry, Administrative Law, Working Paper 17.* Ottawa, 1977.

Canada, Ministry of Transport. "Mackenzie River Valley Transportation." Evidence presented on behalf of Commission Counsel to the Mackenzie Valley Pipeline Inquiry. Yellowknife, 1976.

Canada, Ministry of Transport, Arctic Transportation Agency. *The Effect of Proposed Staging Sites for Pipeline Construction on Mackenzie Valley Transportation.* n.p., 1976.

Canada, National Energy Board. *Reasons for Decision: Northern Pipelines.* 3 vols. Ottawa, 1977.

———. *Mackenzie Valley Hearing.* Orders GH-1-76 and AO-9-GH-1-76. 208 volumes of transcripts. Ottawa, 1976-1977.

Canada, Office of the Prime Minister. "Political Development in the Northwest Territories." Government background paper concerning the appointment of the Honourable Charles M. Drury as Special Representative for Constitutional Development in the Northwest Territories. Ottawa, 1977.

Canada, Privy Council. O.C. 52, January 26, 1891.

Canada, Science Council of Canada. *Northward Looking — A Strategy and a Science Policy for Northern Development.* Report No. 26. Ottawa, 1977.

Canada, Select Committee of the Senate. *Report of the Select Committee of the Senate Appointed to Enquire into the Resources of the Great Mackenzie Basin.* Session 1888. Ottawa: Queen's Printer, 1888.

Canada, Task Force on Northern Oil Development. *Mackenzie Valley and Northern Yukon Pipelines, Socio-Economic and Environmental Aspects.* Environmental-Social Committee, Northern Pipelines, Task Force on Northern Oil Development, Report no. 74-17. Ottawa, 1974.

Canada, Statistics Canada. *Fur Production (23-207 annual).* Seasons 1965-66 to 1975-76. Ottawa, 1967-1977.

Canada, Alberta, Division of Environmental Health, Water and Pollution Control Section. *Surface Water Quality Criteria, Province of Alberta.* n.p., 1970.

Canada, Northwest Territories. *Commissioner's Orders, 477-73 and 181-74.* [1973, 1974.]

Canada, Northwest Territories, Department of Natural and Cultural Affairs, Recreation Division. "Guide to Services and Programs." n.p., n.d.

———. "Recreation Leadership and Leisure Education, A Proposal to the Executive Committee." n.p., 1975.

———. "Report on Recreation Services in the Northwest Territories." n.p., 1975.

Canada, Northwest Territories, Department of Social Development, Alcohol and Drug Program. *Proposal for the Secondary Prevention of Alcohol and Crime Problems.* n.p., 1975.

Canada, Northwest Territories, Petroleum Resource Development Project Group. *Mackenzie Corridor Development Plan.* Environmental-Social Committee, Northern Pipelines, Task Force on Northern Oil Development, Report No. 74-43. Ottawa, 1975.

Canada, Ontario, Ministry of the Environment. *Model Municipal Noise Control By-Law, Revised May, 1976.* Noise Pollution Control Section. Toronto, 1976.

Canadian Arctic Gas Pipeline Limited. Applications and Supporting Documents to the Applications of Canadian Arctic Gas Pipeline Limited to the National Energy Board and to the Department of Indian Affairs and Northern Development. n.p., 1974 to 1977.

———. "Mackenzie Valley Pipeline Inquiry, Outline of Submissions of Canadian Arctic Gas Pipeline Limited." Evidence presented to the Mackenzie Valley Pipeline Inquiry. Yellowknife, 1977.

———. "Northern Staging Area Report." Evidence presented to the Mackenzie Valley Pipeline Inquiry. Yellowknife, 1976.

———. *Responses to National Energy Board Requests for Additional Information.* 9 vols. n.p., 1976.

———. *Responses to Pipeline Application Assessment Group Requests for Supplementary Information.* Toronto, 1974.

———. "Statement of Substance of Evidence to be Presented by a Panel Composed of Dr. J.I. Clark, *et al.* Relating to the Geotechnical Aspects of the Engineering Design in 'Location, Design and Capacity of Facilities,' Section 8, Appendix B." Evidence presented to the Mackenzie Valley Pipeline Inquiry. Yellowknife, 1975.

———. "Written Direct Testimony, Phase 1A, National Energy Board Hearing, Ottawa." Evidence presented to the National Energy Board Hearing. Ottawa, 1976.

Canadian Arctic Resources Committee. *Final Argument and Recommendations — Mackenzie Valley Pipeline Inquiry.* Ottawa, 1976.

Canadian Council on Rural Development. *A Development Strategy for the Mid-North of Canada,* Ottawa, 1976.

———. *Working Papers, Seminar, Environmentally Appropriate Technology for the Mid-North of Canada.* Ottawa, 1976.

Canadian Pipeline Advisory Council. "Submission to Mr. Justice Thomas R. Berger, Commissioner, Mackenzie Valley Pipeline Inquiry on Phase IV, the Human Environment." Evidence presented on behalf of Commission Counsel to the Mackenzie Valley Pipeline Inquiry. Yellowknife, 1976.

Canadian Standards Association. *Standard Z184, Gas Pipeline Systems.* Toronto, 1975.

Chamberlin, J.E. *The Harrowing of Eden, White Attitudes toward Native Americans.* New York: Seabury Press, 1975.

Chrétien, Honourable Jean, Minister of Indian Affairs and Northern Development. *Statement of the Government of Canada on Indian Policy, 1969.* Ottawa, 1969.

Clark, A. McFadyen, ed. *National Museum of Man Mercury Series, Proceedings: Northern Athapaskan Conference, 1971.* 2 vols. Ottawa: National Museums of Canada, 1975.

Committee for Original Peoples Entitlement – Inuit Tapirisat of Canada. "Argument, Terms and Conditions and Recommendations." Evidence presented to the Mackenzie Valley Pipeline Inquiry. Yellowknife, 1976.

The Council for Science and Society. *Superstar Technologies.* Report of a Working Party – Convenor: Geoffrey Chin. London: Barry Rose (Publishers) Ltd., 1976.

Dailey, Tom, and Dave Redman. *Guidelines for Roadless Area Campsite Spacing to Minimize Impact of Human-related Noises.* United States Department of Agriculture Forest Service General Technical Report PNW-35. Portland, Oregon, 1975.

Dear, Michael. "Planning Community Health Services in Arctic Canada." Research Report to the Presidential Committee on Northern Studies, McMaster University. Hamilton, 1976.

Deloria, Vine, Jr. "The Lummi Indian Community: The Fishermen of the Pacific Northwest." Evidence presented on behalf of the Indian Brotherhood of the Northwest Territories to the Mackenzie Valley Pipeline Inquiry. Yellowknife, 1976.

Deprez, Paul. *The Pine Point Mine and the Development of the Area South of Great Slave Lake.* Center for Settlement Studies, University of Manitoba, Series 2, Research Report No. 16. Winnipeg, 1973.

Devitt, W.G. "History of Eduction in the Northwest Territories," *Education North of 60.* The Canadian Superintendent 1964, A Report Prepared by Members of the Canadian Association of School Superintendents and Inspectors in the Department of Northern Affairs and National Resources. Toronto: Ryerson Press, 1965.

Dosman, Edgar J, *The National Interest, The Politics of Northern Development 1968-75.* Toronto: McClelland and Stewart Ltd., 1975.

Dryden, R.L. and J.N. Stein. *Guidelines for the Protection of the Fish Resources of the Northwest Territories During Highway Construction and Operation.* Department of the Environment, Fisheries and Marine Service, Technical Report Series No. CEN/T-75-1. Winnipeg, 1975.

Dunbar, M.J. *Environment and Good Sense, An Introduction to Environmental Damage and Control in Canada.* Montreal and London: McGill-Queen's University Press, 1971.

EBA Engineering Consultants Ltd. "Terrain Study and Thaw Settlement Analysis (Mile 678 to Mile 784)." Foothills Pipe Lines Ltd. n.p., 1976.

Eggleton, Peter L. and Jacques Laframbroise. *Field Evaluation of Towed Air Cushion Rafts.* Ministry of Transport, Report TDA-500-166. Ottawa, 1974.

Environment Protection Board. *Environmental Impact Assessment of the Portion of the Mackenzie Gas Pipeline from Alaska to Alberta.* 4 vols. Winnipeg, 1974.

European Inland Fisheries Advisory Commission. "Report on Finely Divided Solids and Inland Fisheries." *International Journal of Air and Water Pollution,* Vol. 9 (1965), pp. 151-68.

Feit, H. "Use of Official Fur Statistics as Indicators of Fur Bearing Mammal Harvests." Interim Report No. 4 of the Fort George Resource Use and Subsistence Economy Study, Grand Council of the Crees. Montreal, 1975.

Finney, George, *et al. Biological Field Program Report: 1975.* The Lombard North Group Ltd., for Foothills Pipe Lines Ltd. 4 vols. n.p., 1976.

Fison, Susan R. "Socio-economic Impact of the Trans-Alaska Oil Pipeline on Fairbanks, Alaska." Evidence presented to the Alaska Highway Pipeline Inquiry. Whitehorse, 1977.

Flynn, D. "Recreation North." Requested by Northwest Territories Department of Local Government for Presentation to Territorial Council. n.p., 1974.

Foote, D.C. "Exploration and Resource Utilization in Northwestern Alaska before 1855." Unpublished Ph.D. Thesis in Geography. McGill University, Montreal, 1965.

Foothills Pipe Lines Ltd. Applications and Supporting Documents to the Applications of Foothills Pipe Lines Ltd. to the National Energy Board and to the Department of Indian Affairs and Northern Development. n.p., 1975 to 1977.

———. "A Preliminary Study into the Use of Insulation to Alleviate Frost Heave Problems Relevant to the Operation of a Cold Gas Pipeline." n.p., 1976.

Forrest, Ann. "An Evaluation of the Alaska Native Claims Settlement Act." Evidence presented on behalf of the Indian Brotherhood of the Northwest Territories to the Mackenzie Valley Pipeline Inquiry. Yellowknife, 1976.

Forth, T.G., *et al. Mackenzie Valley Development: Some Implications for Planners.* Environmental-Social Committee Northern Pipelines, Task Force on Northern Oil Development, Report No. 73-45. Ottawa, 1974.

Friesen. B. Fred. *Potential Inuit Benefits from Commercial and Sports Use of Arctic Renewable Resources.* Vol. X of *Renewable Resources Project.* Inuit Tapirisat of Canada. n.p., 1975.

Friesen, B.F., and J.G. Nelson. "An Overview of the Economic Potential of Renewable Resources in the Canadian Arctic." Unpublished manuscript. Waterloo, Ontario, 1975.

G.A. Friesen (Canada) Ltd., Health Care Consultants. *Mackenzie River Area Health Services Study.* 2 vols. Calgary, 1974.

Fumoleau, René, OMI. *As Long As This Land Shall Last, A History of Treaty 8 and Treaty 11, 1870-1939.* Toronto: McClelland and Stewart, [1973].

Geist, V. *Mountain Sheep.* Chicago: University of Chicago Press, 1971.

Gemini North Ltd. *Alaska Native Participation in the Trans-Alaska Pipeline Project, A Survey of Manpower Delivery Systems.* Department of Indian Affairs and Northern Development. Vancouver, 1975.

———. *Social and Economic Impact of Proposed Arctic Gas Pipeline in Northern Canada,* 7 vols. Canadian Arctic Gas Pipeline Limited. n.p., 1974.

Glover, M. ed. *Building in Northern Communities: 1974.* Organized by The Arctic Institute of North America. Montreal, 1974.

Godfrey, E. Earl. *The Birds of Canada.* National Museums of Canada. Bulletin No. 203, Biological Series No. 73. Ottawa, 1966.

Gourdeau, Eric. "The Native Use of Resources in the Context of the Proposed Mackenzie Gas Pipeline," Chapter 11, *Research Reports, Environmental Impact Assessment of the Portion of the Mackenzie Gas Pipeline from Alaska to Alberta.* Vol. IV, Environment Protection Board. Winnipeg, 1974, pp. 293-307.

Gunn, W.W.H. "The Need to Preserve the Integrity of the Mackenzie Delta." *Ornithological Studies, Cross Delta Route.* LGL Limited, Environmental Research Associates. n.p., 1975.

Gray, John A. *Stability of Employment and Production Within Canadian Resource-Based Industries.* Center for Settlement Studies, The University of Manitoba. Winnipeg, 1975.

Hansen, H.A. "Utilization of Wildlife by Alaska Natives." Unpublished manuscript, Alaska Bureau of Sport Fisheries and Wildlife. n.p., 1975.

Harlan, R.L. *Hydrogeological Considerations in Northern Pipeline Development.* Environmental-Social Committee, Northern Pipelines, Task Force on Northern Oil Development, Report No. 74-26. Ottawa, 1974.

Hartland-Rowe, R.C.B., and P.B.Wright. *Swamplands for Sewage Effluents – Final Report.* Environmental-Social Committee, Northern Pipelines, Task Force on Northern Oil Development, Report No. 74-4. [Ottawa], 1974.

Heacock, H.A. "A Summary of Transport Canada's Responsibilities and Activities Respecting Aircraft Operations in Northern Canada." Evidence presented on behalf of Commission Counsel to the Mackenzie Valley Pipeline Inquiry. Yellowknife, 1976.

Helm, June. "Traditional Dene Community Structure and Socioterritorial Organization." n.p., 1976.

Hobart, Charles W. "Socio-Economic Overview of the Mackenzie Delta Region." Evidence presented on behalf of the Oil Producers to the Mackenzie Valley Pipeline Inquiry. Inuvik, 1976.

Hunt, Constance. "The Development and Decline of Northern Conservation Reserves." *Contact, Journal of Urban and Environmental Affairs,* University of Waterloo, Vol. 8, No. 4 (1976) pp. 30-75.

Inhaber, H. "Environmental Quality: Outline for a National Index for Canada." *Science,* Vol. 186 (1974), pp. 798-805.

Innis, H.A. *Empire and Communications.* Toronto, 1950.

Interdisciplinary Systems Ltd. "Recommendations for Site Specific Terms and Conditions for the Arctic Gas Proposal." Maps prepared for Northern Environment Foundation. Evidence presented by C.H. Templeton to the Mackenzie Valley Pipeline Inquiry. Yellowknife, 1976.

———. "Recommendations for Site Specific Terms and Conditions for the Foothills Proposal." Maps prepared for Northern Environment Foundation. Evidence presented by C.H. Templeton to the Mackenzie Valley Pipeline Inquiry. Yellowknife, 1976.

Jacobson, Jerald O. "Potential Impact of the Mackenzie Gas Pipeline on Bird Populations in the Yukon and Northwest Territories," Chapter 6, *Research Reports, Environmental Impact Assessment of the Portion of the Mackenzie Gas Pipeline from Alaska to Alberta*, Vol. IV, Environment Protection Board. Winnipeg, 1974. pp. 121-76.

Jakimchuk, R.D. Letter to Mr. Justice Thomas Berger, concerning the Porcupine Caribou Herd and the Dempster Highway. Edmonton, June 19, 1977.

The James Bay and Northern Québec Agreement, Editeur Officiel du Québec. Québec, 1976.

James Bay and Northern Quebec Native Harvesting Research Committee. *Research to Establish Present Levels of Harvesting by Native Peoples of Northern Quebec*. Part I, *A Report on the Harvests by the James Bay Cree*, 2 vols. Part II, *A Report on the Harvests by the Inuit of Northern Québec*. Montreal, 1976.

Jenness, Diamond. *Eskimo Administration*. The Arctic Institute of North America, Technical report No. 14. Montreal, 1964.

———. *People of the Twilight*. New York: MacMillan Company, 1928.

Katz, J. "Proposed Mental Health Legislation, Working Draft." Anchorage, 1975.

Kelsall, J.P. *The Migratory Barren-Ground Caribou of Canada*. Canadian Wildlife Service, Department of Indian Affairs and Northern Development. Ottawa, 1968.

Kerfoot, Helen. "Mackenzie Delta – A Summary Report of Surface Conditions." Final Draft, Geological Survey of Canada. Ottawa, 1975.

Kitto, Franklin Hugo. *New Oil Fields of Northern Canada*. Ottawa: Department of the Interior, 1921.

Klein, David R. "Reaction of Reindeer to Obstructions and Disturbances." *Science*, Vol. 173 (1971), pp. 393-98.

Klohn Leonoff Consultants Ltd. *Preliminary Design for Drainage and Erosion Control for Study Area at MP 311-3*. Foothills Pipe Lines Ltd. Calgary, 1976.

Kuo, Chan-Yan. *A Study of Income and Income Distribution in the Arctic Coast and Baffin Regions of Northern Canada*. Regional Planning Section, Policy and Planning ACND Division, Northern Policy and Program Planning Branch, Department of Indian Affairs and Northern Development. Ottawa, 1973.

LaResche, D., *et al.* "Alaska Mental Health Needs Survey." n.p., n.d.

LeDain, Gerald E. *Law and Social Change: The Role of the Public Inquiry in our Constitutional System*. Osgoode Hall Law School, York University, Annual Lecture Series 1971-1972, ed. Jacob S. Ziegel.

Lovesey, E.J. "Hovercraft Noise and Vibration." *Journal of Sound and Vibration*, 20(2)(1972), pp. 241-45.

Lu, Chang-Mei. *Estimation of Net Imputed Value of Edible Subsistence Production in Northwest Territories*. Department of Indian Affairs and Northern Development, Economic Staff Group. Ottawa, 1972.

———. *A Study of Health in the Northwest Territories*. Regional Planning and Manpower Section, Economic Staff Group, Northern Economic Development Branch, Department of Indian Affairs and Northern Development. Ottawa, 1972.

Lysyk, Kenneth M., *et al. Alaska Highway Pipeline Inquiry*. Ottawa, 1977.

MPS Associates Ltd. "Effect of Changing the Duration of Pipeline Construction on Selected Variables." Evidence presented on behalf of Commission Counsel to the Mackenzie Valley Pipeline Inquiry. Yellowknife, 1976.

Macauley, A.J., and D.A. Boag. "Waterfowl Harvest by Slave Indians in Northern Alberta." *Arctic*, 27(1)(1974), pp. 15-26.

McColgan, I.J. "Air Pollution Emissions and Control Technology – Packaged Incinerators." Combustion Sources Division, Abatement and Compliance Branch, Air Pollution Control Directorate, Department of the Environment. n.p., 1976.

McCullum, Hugh, and Karmel McCullum. *This Land is Not for Sale, Canada's Original People and their Land, A Saga of Neglect, Exploitation, and Conflict*. Toronto: Anglican Book Centre, 1975.

McCullum, Hugh, *et al. Moratorium: Justice, Energy, the North, and the Native People*. Toronto: Anglican Book Centre, 1975.

Mackay, J. Ross. *The Mackenzie Delta Area, N.W.T.* Geological Survey of Canada, Miscellaneous Report 23. Ottawa, 1964.

McLaren, I.A. *The Economics of Seals in the Eastern Canadian Arctic*. Fisheries Research Board of Canada, Arctic Unit, Circular No. 1. Montreal, 1958.

McLean, W.T.R., and M.E. Stiles. *Cost of Living Study for the Northwest Territories*. Marketing Information Services Ltd. Edmonton and Yellowknife, 1974.

McRoberts, E.C. "Some Aspects of a Simple Secondary Creep Model for Deformations in Permafrost Slopes." *Canadian Geotechnical Journal*, Vol. 12, No. 1 (1975), pp. 98-105.

McRoberts, E.C. and N.R. Morgenstern. "The Stability of Slopes in Frozen Soil, Mackenzie Valley, N.W.T." *Canadian Geotechnical Journal*, Vol. 11, No. 4 (1974), pp. 554-73.

———. "Stability of Thawing Slopes." *Canadian Geotechnical Journal*, Vol. 11 (1974), pp. 447-69.

———. *A Study of Landslides in the Vicinity of the Mackenzie River Mile 205 to 660.* Environmental-Social Committee, Northern Pipelines, Task Force on Northern Oil Development, Report No. 73-35. Ottawa, 1973.

McTaggart-Cowan, Ian. "Biota Pacifica 2000," *Mankind's Future in the Pacific*, ed. R.F. Scagel. Vancouver: University of British Columbia Press, 1976.

———. "An 'Overview' with Particular Reference to Fish and Wildlife," *Science and the North*. Ottawa, 1972, pp. 109-11.

Mair, Charles. *Through the Mackenzie Basin*. Toronto: William Briggs, 1908.

Manforce Research Associates. "Trade Unions and the `Northern Business Community." n.p., n.d.

Marcotte Research Center. *Project Mental Health: A Study of Opinion North of 60°. Canadian Mental Health Association, Northwest Territories Division. Saskatoon, n.d.*

Milton Freeman Research Limited. *Inuit Land Use and Occupancy Project*, 3 vols. Ottawa: Department of Indian and Northern Affairs, 1976.

Morgenstern, N.R. and J.F. Nixon. "An Analysis of the Performance of a Warm-Oil Pipeline in Permafrost, Inuvik, N.W.T." *Canadian Geotechnical Journal*, Vol. 12 (1975), pp. 199-208.

Morrow, Honourable Justice William G. "Observations on Resource Issues in Canada's North." *Journal of Natural Resource Management and Interdisciplinary Studies*, Vol. 1, No. 1 (1976).

Munro, J.A. *Mackenzie Corridor Development Plan.* Environmental-Social Committee, Northern Pipelines, Task Force on Northern Oil Development, Report No. 74-43. Ottawa, 1975.

Murie, Olaus, J. "Alaska-Yukon Caribou." United States Bureau of Biological Survey, *North American Fauna No. 54.* n.p., 1935.

National Indian Brotherhood. "Declaration on Indian Housing." Policy Paper. n.p., 1974.

———. *Indian Control of Indian Education.* Policy paper presented to the Minister of Indian Affairs and Northern Development. Ottawa, 1976.

Naylor, Larry L., and Lawrence A. Gooding. "Native Hire on the Trans-Alaska Oil Pipeline: April, 1974 to March, 1976.," Fairbanks, Alaska, 1976.

Naysmith, John Kennedy. *Land Use and Public Policy in Northern Canada.* Northern Policy and Program Planning Branch, Northern Program, Department of Indian and Northern Affairs. Ottawa, 1975.

Northern Engineering Services Company Limited. "Depth of Overburden Cover over the Pipe and Pipe Anchorage. Technical and Cost Considerations." Draft. Canadian Arctic Gas Study Limited. [Calgary], 1974.

———. *Drainage and Erosion Control Measures, Description and Proposed Design Principles.* Canadian Arctic Gas Study Limited. Calgary, 1975.

———. *Drainage and Erosion Control: Pilot Design Project.* Canadian Arctic Gas Study Limited. Calgary, 1976.

———. "Frost Heave Information Pursuant to National Energy Board Requests of May 11, 12 and 14, 1976." Canadian Arctic Gas Study Limited. Calgary, 1976.

———. "Interim Report, Slope Stability in Permafrost Terrain." Canadian Arctic Gas Study Limited. Calgary, 1974.

———. *Mechanical Stress Analysis of Buried Pipeline.* 3 vols. Canadian Arctic Gas Study Limited. Calgary, 1975.

———. "Response to Dr. P.J. Williams' Report on Possible Heave of Chilled Gas Pipeline." Canadian Arctic Gas Study Limited. Calgary, 1976.

———. "Stability of Excavated Submarine Slopes in Mackenzie River Delta Sediments." An exhibit to the National Energy Board Hearing, exhibit No. N-PD-359. Ottawa, 1976.

The Northwest Territories Association of Municipalities. "Summary of Recommendations." Evidence presented to the Mackenzie Valley Pipeline Inquiry. Yellowknife, 1976.

Northwest Territories Council, Task Force on Housing. *Report.* n.p., 1972.

Northwest Territories Drug Coordinating Council. *Northwest Territories Drug Coordinating Council Annual Report, April 1974-March 1975.* n.p., 1975.

Novakowski, N.S. "Cemental Deposition as an Age Criterion in Bison, and the Relation of Incisor Wear, Eye-Lens Weight, and Dressed Bison Carcass Weight to Age." *Canadian Journal of Zoology*, 43 (1965), pp. 173-78.

———. Personal Communication with Peter J. Usher. June 7, 1977.

Novakowski, N.S., and V.E.F. Solman. "Potential of Wildlife as a Protein Source." *Journal of Animal Science*, 40(5)(1975), pp. 1016-19.

O'Hara, P.J. "Contingency Planning Guidelines, Oil and Gas Pipelines." Draft, Department of the Environment. n.p., 1977.

———. "Contingency Planning Guidelines, Oil and Hazardous Material Spills, Oil and Gas Pipelines." Second Draft. n.p., 1977.

Olson, Sigurd F. *The Lonely Land*. Toronto: McClelland and Stewart Ltd., 1961.

———. *Runes of the North*. New York: Alfred F. Knopf, 1963.

O'Malley, Martin. *The Past and Future Land, An Account of the Berger Inquiry into the Mackenzie Valley Pipeline*. Toronto: Peter Martin Associates Ltd., 1976.

Palmer, John. *Social Accounts for the North: Interim Paper No. 3; The Measurements of Incomes in the Yukon and Northwest Territories*. Economic Staff Group, Department of Indian Affairs and Northern Development. Ottawa, 1973.

Peacock, Donald. *People, Peregrines and Arctic Pipelines, The Critical Battle to Build Canada's Northern Gas Pipelines*. Vancouver: J.J. Douglas Ltd., 1977.

Pearson, Arthur M. "Habitat, Management, and the Future of Canada's Grizzly Bears." Manuscript. Edmonton, 1976.

Peterson, E.B. "Biological Productivity of Arctic Lands and Waters: A Review of Canadian Literature," *Inuit Land Use and Occupancy Project*, Vol. 2, *Supporting Studies*, Milton Freeman Research Limited. Ottawa: Department of Indian and Northern Affairs, 1976, pp. 85-100.

Pipeline Application Assessment Group. *Mackenzie Valley Pipeline Assessment, Environmental and Socio-Economic Effects of the Proposed Canadian Arctic Gas Pipeline on the Northwest Territories and Yukon*. Department of Indian Affairs and Northern Development. Ottawa, 1974.

Pipeline Impact Information Center Report. Fairbanks North Star Borough. No. 1 (July 1974) to No. 39 (July 1977).

Platt, Joseph B., and C. Eric Tull. "A Study of Wintering and Nesting Gyrfalcons on the Yukon North Slope During 1975 with Emphasis on their Behavior During Experimental Overflights by Helicopters." *Ornithological Studies Conducted in the Area of the Proposed Gas Pipeline Route: Northern Alberta, Northwest Territories, Yukon Territory and Alaska, 1975*. Canadian Arctic Gas Study Limited, Biological Report Series Vol. 35, Chap.I. n.p., 1977.

A Portrayal of our Metis Heritage, ed. Joanne Overvold (Burger). Metis Association of the Northwest Teritories. n.p., 1976.

Poston, H.J. *Waterfowl Populations Observed Along the Proposed Gas Pipeline Route, Richards Island to N.W.T.-Alberta Border*. Canadian Wildlife Service. n.p., 1973.

Poston, H.J., *et al. Atlas of Waterfowl Habitat Maps. Part of a Wildlife Habitat Inventory of the Mackenzie Valley and the Northern Yukon*. Canadian Wildlife Service for Environmental-Social Committee, Northern Pipelines, Task Force on Northern Oil Development. n.p., 1973.

Pufahl, D.E., *et al. Observations on Recent Highway Cuts in Permafrost*. Environmental-Social Committee, Northern Pipelines, Task Force on Northern Oil Development, Report No. 74-32. Ottawa, 1974.

Reed, Hayter. "Introduction," *Annual Report of the Department of Indian Affairs for the Year ending 30th June, 1893. Ottawa, 1894*.

In *Renewable Resources Project*. Inuit Tapirisat of Canada. n.p., 1975:

Vol. I: Scace, Robert C. *Exploration, Settlement and Land Use Activities in Northern Canada: Northern Canada: Historical Review*.

Vol. II: Boreal Institute for Northern Studies. *Canadian Arctic Renewable Resource Mapping Project and Map Supplement*.

Vol. III: Usher, Peter J. *Historical Statistics Approximating Fur, Fish and Game Harvests Within Inuit Lands of the NWT and Yukon 1915-1975, With Text*.

Vol. IV: de Pape, D., *et al. A Socio-economic Evaluation of Inuit Livelihood and Natural Resource Utilization in the Tundra of the Northwest Territories*.

Vol. V: Turkheim, Richard J. *Biophysical Impacts of Arctic Hydro-electric Developments*.

Vol. VI: Brown, S. *Environmental Impacts of Arctic Oil and Gas Development*.

Vol. VII: Van Diepen, Philip. *The Impact of Mining on the Arctic Biological and Physical Environment*.

Vol. VIII: Mann, Donald. *The Socio-economic Impact of Non-Renewable Resource Development on the Inuit of Northern Canada*.

Vol. IX: Butler, Richard. *The Development of Tourism in the Canadian North and Implications for the Inuit*.

Vol. X: Friesen, B. Fred. *Potential Inuit Benefits from Commercial and Sports Use of Arctic Renewable Resources*.

Vol. XI: J.G. Nelson. *Summary of Recommendations*.

Richardson, B. *Strangers Devour the Land, The Cree Hunters of the James Bay Area Versus Premier Bourassa and the James Bay Development Corporation.* Toronto: Macmillan, 1975.

Robinson, J.L. "Land Use Possibilities in Mackenzie District, N.W.T." *Canadian Geographical Journal*, 31(1) (1945), pp. 30-47.

Royal Commission on Labrador. *Report of the Royal Commission on Labrador*, Vol. III, *Economic Factors.* St. John's, 1974.

Rushforth, Scott. "Recent Land-Use by the Great Bear Lake Indians." Evidence presented on behalf of the Indian Brotherhood of the Northwest Territories and the Metis Association of the Northwest Territories to the Mackenzie Valley Pipeline Inquiry. Yellowknife, 1975.

Russell, Frank. *Explorations in the Far North.* Iowa City: University of Iowa, 1898.

Ruttan, Robert A., and John T'Seleie. "Renewable Resource Potentials for Alternative Development in the Mackenzie River Region." Evidence presented on behalf of the Indian Brotherhood of the Northwest Territories to the Mackenzie Valley Pipeline Inquiry. Yellowknife, 1976.

J.E. Rymes Engineering Ltd. *Preliminary Report of Work and Transportation Equipment for Canadian Arctic Gas Study Limited, Operation and Maintenance, Calgary, Alberta.* Calgary, 1975.

Sanders, Douglas E. "Aboriginal Title: A Legal Perspective." Evidence presented on behalf of the Indian Brotherhood of the Northwest Territories to the Mackenzie Valley Pipeline Inquiry. Yellowknife, 1976.

———. "Testimony to the Mackenzie Valley Pipeline Inquiry." Evidence presented on behalf of the Indian Brotherhood of the Northwest Territories to the Mackenzie Valley Pipeline Inquiry. Yellowknife, 1976.

Savishinsky, Joel S. "Kinship and the Expression of Values in an Athabascan Bush Community." *Western Canadian Journal of Anthropology.* 2(1970), pp. 31-59.

Schaefer, Otto. "Letter and Enclosures from Dr. O. Schaefer in Response to Cross-examination of September 15, 1976." Evidence presented on behalf of Commission Counsel to the Mackenzie Valley Pipeline Inquiry. Yellowknife, 1976.

Scott, Michel. *The Socio-Eocnomic Impact of the Pointed Mountain Gas Field.* Northern Policy and Program Planning Branch, Department of Indian Affairs and Northern Development. [Ottawa], 1973.

Scotter, G.W. "Reindeer Husbandry as a Land Use in Northwestern Canada." *Productivity and Conservation in Northern Circumpolar Lands*, eds. W.A. Fuller and P.G. Kevan. IUCN PUblications, New Series No. 16. Morges, Switzerland, 1970.

Scotter, G.W., and E.S. Telfer. "Potential for Read Meat Production From Wildlife in Boreal and Arctic Regions." *Proceedings of the Circumpolar Conference on Northern Ecology*, September 15-18, 1975, Ottawa. National Research Council. Ottawa, 1975.

Sergeant, D.E., and W. Hoek. "Whales in the Mackenzie Delta and Beaufort Sea." Arctic Biological Station, Fisheries and Marine Service, Department of the Environment. Evidence presented on behalf of the Committee for Original Peoples Entitlement to the Mackenzie Valley Pipeline Inquiry. Inuvik, 1976.

Siegfried, André. *Canada*, trans. H.H. Hemming and Doris Hemming. London, 1937.

Simmons, N.M. "Dall's Sheep Harvest in the Richardson Mountains, Northwest Territories." Unpublished manuscript, Canadian Wildlife Service, CWSC 1540. Fort Smith, N.W.T., 1973.

F.F. Slaney & Company Limited. "The 1975 White Whale Study." Preliminary Draft, Imperial Oil Limited. Vancouver, 1975.

Slipchenko, Walter. *Siberia 1971: A Report on the Visit of the Honourable Jean Chrétien, Minister of Indian Affairs and Northern Development and Official Delegation to the Soviet Union, July-August 1971.* Ottawa, 1972.

Slobodin, Richard. *Metis of the Mackenzie District.* Ottawa: St. Paul University, 1966.

Smelcar, Thea. "One Year Later: Pipeline Impact Report, Copper River Valley." Copper River Native Association. Copper River, Alaska, 1975.

Smith, Derek G. *Natives and Outsiders: Pluralism in the Mackenzie River Delta, Northwest Territories.* Department of Indian and Northern Affairs. Ottawa, 1975.

———. Personal Communication with Peter J. Usher. June 3, 1977.

Smith, N., and R. Berg. "Encountering Massive Ground Ice During Road Construction in Central Alaska." *North American Contribution, Second International Permafrost Conference.* 13-28 July 1973. Yakutsk, U.S.S.R. Washington, D.C.: National Academy of Sciences, 1973.

Smith, P.A., and C.J. Jonkel. *Resumé of the Trade in Polar Bear Hides in Canada, 1972-73.* Canadian Wildlife Service, Progress Note No. 43. Ottawa, 1975.

——— *Resumé of the Trade in Polar Bear Hides in Canada, 1973-74.* Canadian Wildlife Service. Progress Note No. 48. Ottawa. 1975.

Smith, P.A., and I. Stirling. *Resumé of the Trade in Polar Bear Hides in Canada, 1974-75.* Canadian Wildlife Service, Progress Note No. 66. Ottawa. 1976.

Smith. T.G., and D. Taylor. *Notes on Marine Mammal, Fox and Polar Bear Harvests in the Northwest Territories, 1940 to 1972.* Environment Canada. Fisheries and Marine Services, Technical Report No. 694. n.p., 1977.

Stager, J.K. *Old Crow, Y.T. and the Proposed Northern Gas Pipeline.* Environmental-Social Committee, Northern Pipelines. Task Force on Northern Oil Development, Report No. 74-21. Ottawa, 1974.

Stanley Associates Engineering Ltd. *Hay River Staging Area Study.* Canadian Arctic Gas Pipeline Limited. n.p., 1977.

——— *Hay River Industrial Development Study.* Canadian Arctic Gas Pipeline Limited. n.p., 1975.

——— *Mackenzie Valley Pipeline Community Impact Study.* The Northwest Territories Association of Municipalities. n.p., 1975.

Stegner, Wallace. "The Wilderness Idea," *Voices for the Wilderness,* ed. William Schwartz. New York: Ballantine Books, 1969. pp.283-89.

Sterling, R.P. Personal Communication with Peter J. Usher. June 7,1977.

Sterrett, K.F. *The Arctic Environment and the Arctic Surface Effect Vehicle.* Corps of Engineers, United States Army, Cold Regions Research and Engineering Laboratory, Report 76-1. Hanover, New Hampshire. 1976.

Strong, Maurice. Article in *The Edmonton Journal.* Sept. 22, 1976.

A Survey of the Contemporary Indians of Canada, ed. H.B. Hawthorn, Vol. II. Department of Northern Affairs and National Resources, Indian Affairs Branch, Ottawa, 1967.

Templeton, Carson. "Final Argument – Submitted by Carson Templeton to the Mackenzie Valley Pipeline Inquiry." Winnipeg, 1976.

Templeton Engineering Company. *Assessment of Environmental Protection Activities on the Mackenzie Valley Gas Pipeline.* Department of the Environment, Environmental Protection Service, Policy and Planning Report EPS-2-NW-76-1. Winnipeg, 1976.

Tener, J.S. *Muskoxen in Canada.* Canadian Wildlife Service, Department of Northern Affairs and National Resources. Ottawa, 1965.

Terminus Limited. "Trans-Alaska Pipeline – Special Study, An Overview Study with Respect to Effectiveness of the Stipulations During the Construction Phase and an Analysis of Experience Gained which may be of use for Grant of ROW for Future Pipeline Projects." United States Department of the Interior, Alaska Pipeline Office. Toronto, 1977.

Thibault, E. *Regional Socio-Economic Overview Study, Yukon Territory.* Environmental-Social Committee, Northern Pipelines, Task Force on Northern Oil Development, Report No. 74-46. Ottawa, 1975.

Thiessen, George. Personal Communication with L. Burgess. August 1977.

Thomas, W.A., ed. *Indicators of Environmental Quality.* Plenum, New York, 1972.

Tocqueville, A. de. *Democracy in America,* ed. Phillips Bradley. New York: Alfred F. Knopf, 1953.

Trudeau, Honorable Pierre. "Transcript of the Prime Minister's Remarks at the Vancouver Liberal Association Dinner." Seaforth Armories, Vancouver, B.C., August 8, 1969.

———. *Notes for an Address by the Prime Minister to the Annual Meeting of the Canadian Press.* Toronto, April 15, 1970.

Udall, Stewart L. *The Quiet Crisis.* New York: Avon Books, 1963.

Underwriters Laboratories of Canada. *Standard S601, Shop Fabricated Steel Above-Ground Tanks for Flammable and Combustible Liquids.* Scarborough, Ont., 1976.

———. *Standard S603, Steel Underground Tanks for Flammable and Combustible Liquids.* Scarborough, Ont., 1976.

———. *Standard S603.1, Protected Steel Underground Tanks for Flammable and Combustible Liquids.* Scarborough, Ont., 1976.

United States, Congress. *A Bill,* Administration of proposed amendments for an "Alaska National Interest Lands Conservation Act." H.R.39, 95th Congress, 1st Session, 1977.

United States, Congress, Senate. *Senate Bill 2917.* 1974.

United States, Department of the Interior. *2(c) Report: Federal Programs and Alaska Natives.* 4 Vols. n.p., n.d.

———. *Alaska Natural Gas Transportation System, Final Environmental Impact Statement,* 9 Vols. Washington, D.C., 1976.

United States, Laws, Statutes etc. *Johnson v. McIntosh.* (1823), 21 U.S., 543, 572.

———. *Worcester v. Georgia.* (1832), 31 U.S., 350 at 369.

United States, National Academy of Sciences and National Academy of Engineering, Environmental Studies Board, Committee on Water Quality Criteria. *Water Quality Criteria, 1972.* Environmental Protection Agency. Washington, D.C., 1973.

United States, President. "Message to the Congress of the United States." Jimmy Carter. May 23, 1977.

University of British Columbia. "Proceedings of the Arctic International Wildlife Range Conference – October 21 and 22, 1970," *University of British Columbia Law Review.* Vol. 6, No. 1, Supplement, June 1971.

University of Waterloo, Faculty of Environmental Studies. "Arctic Land Use Issues," *Contact, Journal of Urban and Environmental Affairs,* Vol. 8, No. 4 (1976).

Usher, Peter J. *The Bankslanders: Economy and Ecology of a Frontier Trapping Community,* Vol. 2, *Ecology.* Northern Science Research Group, NSRG-71-2. Ottawa: Department of Indian Affairs and Northern Development, 1971.

———. *Economic Basis and Resource Use of the Coppermine–Holman Region, N.W.T.* Northern Coordination and Research Centre, Report NCRC-65-2, Department of Northern Affairs and National Resources. Ottawa, 1965.

———. "Eskimo Land Use Maps." Fifteen maps compiled for the Inuit Land Use and Occupancy Project. Ottawa, 1976.

———. "Evaluating Country Food in the Northern Native Economy." *Arctic,* 29(2)(1976), pp. 105-20.

———. "Historical Statistics Approximating Fur, Fish and Game Harvests in the Mackenzie Valley N.W.T. 1915-1976." Unpublished report to Department of Education, Government of the Northwest Territories. Ottawa, 1977.

———. *Historical Statistics Approximating Fur, Fish and Game Harvests Within Inuit Lands of the N.W.T. and Yukon, 1915-1974, With Text.* Vol. 3 of *Renewable Resources Project.* Inuit Tapirisat of Canada. n.p., 1975.

———. "The Traditional Economy of the Western Arctic." Evidence presented on behalf of the Committee for Original Peoples Entitlement to the Mackenzie Valley Pipeline Inquiry. Yellowknife, 1976.

Vogt, William. *Road to Survival.* New York: William Sloane Associates, 1948. Includes quotation of Thomas Jefferson.

Wacko, William J. "Indian Alcohol and Drug Abuse in Alberta." Alcohol and Drug Consultant, Department of Indian and Northern Affairs. n.p., 1974.

———. *Observations and Recommendations Respecting Alcohol and Drugs in the Northwest Territories.* Department of Social Development, Government of the Northwest Territories. n.p., 1973.

Waddell, Ian. "Organizations the Inquiry has Funded." Memorandum prepared for Mackenzie Valley Pipeline Inquiry. Yellowknife, 1976.

Wah-shee, James J. "A Land Settlement – What Does it Mean?" Speech presented to a conference, "Delta Gas: Now or Later" Sponsored by Canadian Arctic Resources Committee, Ottawa, May 24, 1974.

Walker, E.R. *Oil, Ice and Climate in the Beaufort Sea.* Beaufort Sea Technical Report No. 35, Beaufort Sea Project, Department of the Environment. Victoria, 1975.

Watkins, M. *Dene Nation: The Colony Within.* Toronto: University of Toronto Press, 1977.

Watson, G.H. *et al. An Inventory of Wildlife Habitat of the Mackenzie Valley and the Northern Yukon.* Special Habitat Evaluation Group, Canadian Wildlife Service, Department of the Environment for the Environmental-Social Committee, Northern Pipelines, Task Force on Northern Oil Development, Report No. 73-27. Ottawa, 1973.

Weinstein, M.S. "A Discussion of the Possibility of Using the Official Division des Fourrures Fur Statistics by Trapline for an Assessment of Trapline Use." Interim Report No. 5 of the Fort George Resource Use and Subsistence Economy Study, Grand Council of the Crees. Montreal, 1975.

———. *What the Land Provides.* Report of the Fort George Resource Use and Subsistence Economy Study, Grand Council of the Crees (of Quebec). Montreal, 1976.

Wenzel, George. "Residents' Perceptions of the Health Delivery System in Six Settlements in the Inuvik Region, Northwest Territories." Evidence presented on behalf of the Committee for Original Peoples Entitlement to the Mackenzie Valley Pipeline Inquiry. Yellowknife, 1976.

Wilhm, J. "Range of Diversity in Benthic Macroinvertebrate Populations." *Journal of Water Pollution Control.* Vol. 42 (1970), pp. R221-24.

Williams, P.J. "Frost Heave." Summaries of Evidence of Witnesses to be called by Commission Counsel in Phase I of the Inquiry. Mackenzie Valley Pipeline Inquiry. Toronto, 1975.

———. "Report on Possible Heave of Chilled Gas Pipeline." Evidence presented on behalf of Commission Counsel to the Mackenzie Valley Pipeline Inquiry. Yellowknife, 1976.

Witty, J.R. "Employment and Manpower Considerations." Evidence presented on behalf of Commission Counsel to the Mackenzie Valley Pipeline Inquiry. Yellowknife, 1976.

Wolforth, John. *The Mackenzie Delta — Its Economic Base and Development, A Preliminary Study*. Northern Co-ordination and Research Centre, Department of Indian Affairs and Northern Development. Ottawa, n.d.

Wong, G. "Notes on Alcohol Consumption and Expenditure in the NWT." Alcohol and Drug Program, Department of Social Development, Government of the Northwest Territories. Unpublished. n.p., n.d.

Wood, K. Scott. *An Approach to Social Reporting in the Canadian North*. Department of Indian and Northern Affairs, and Institute of Public Affairs, Dalhousie University. Halifax, 1974.

Wright, J.V. "The Destruction of Canada's Prehistory." *Bulletin of the Canadian Archaeology Association*, No. 1, pp. 5-11.

Yazzie, Ethelou. "The Bilingual/Bicultural Experiment of Rough Rock Demonstration School." Evidence presented on behalf of the Indian Brotherhood of the Northwest Territories to the Mackenzie Valley Pipeline Inquiry. Yellowknife, 1976.

Yellowknife Detoxification Center, Northern Addiction Services. *Rehabilitation Needs of the Alcoholic: Yellowknife Area*. Yellowknife, 1975.

Yupiktak Bista. *Does One Way of Life Have to Die so Another Can Live? A Report on Subsistence and the Conservation of the Yupik Life-Style*. n.p., 1974.

Zemansky, Gilbert M. "Environmental Non-Compliance and the Public Interest." Evidence presented on behalf of the Committee for Original Peoples Entitlement to the Mackenzie Valley Pipeline Inquiry. Yellowknife, 1976.

Legislation: Canada

Act of 1869 (S.C. 32-33, Victoria, Ch.3)

Act of Union

Arctic Waters Pollution Prevention Act

Banff National Park Act 1887

British North America Act

Canada Shipping Act

Canada Wildlife Act

Clean Air Act

Dominion Lands Act

Environment Protection Act (Statutes of Ontario, 1971 and amendments)

Fisheries Act

Indian Act

Manitoba Act

Migratory Birds Convention Act

National Energy Board Act

National Parks Act

National Transportation Act

Northern Inland Waters Act

Northwest Territories Act

Québec Education Act

Revised Ordinances of the Northwest Territories, 1974.

Territorial Lands Act

Yukon Act

Canada Sessional Papers 1871, No. 20.

Imperial Order in Council (in Appendix of R.S.C., 1970)

Royal Proclamation of 1763

Treaty No. 8, 1899. Reprint, Queen's Printer, 1966.

Treaty No. 11, 1922. Reprint, Queen's Printer, 1957.

Legislation: United States

Alaska Community Mental Health Services Act (1975)

Indian Self Determination and Education Assistance Act (1975)

Local Hire Act (Alaska) (1972)

Wilderness Act (1964)