



Northern Pipeline Agency
Canada

Administration du pipe-line du Nord
Canada

**NORTHERN PIPELINE
SOCIO - ECONOMIC AND ENVIRONMENTAL
TERMS AND CONDITIONS FOR
THE PROVINCE OF SASKATCHEWAN**

Canada

February , 1981

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TERMS AND CONDITIONS FOR
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February, 1981

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TABLE OF CONTENTS

INTRODUCTION	(i)
--------------	-----

TERMS AND CONDITIONS

Short Title	1
Interpretation	1
Application	3

GENERAL

Compliance with the Law	3
Assistance to Designated Officer	4
Access to Right-of-Way of Pipeline	4
Indemnification	4
Emergency Measures	5

PART I - SOCIO-ECONOMIC TERMS AND CONDITIONS

Undertakings	5
Plans	5
Plan Schedule	6
Information and Consultation	6
Pipeline Labour	8
Orientation of Employees	8
Opportunity Measures	9
Business Opportunities	9
Work Camps	10
Health	10
Security	10
Surveillance, Inspection and Monitoring	11
Compensation for Damage to Property	12
Protection of Native Traditional Harvesting and Cultural Areas	13

PART II - ENVIRONMENTAL TERMS AND CONDITIONS

General Terms and Conditions	15
Terrain, Landscape and Waterbodies	15
Prevention of Erosion and Drainage Disturbances	16
Reclamation and Revegetation	16
Air Quality	17
Noise	18

TABLE OF CONTENTS

INTRODUCTION	(i)
--------------	-----

TERMS AND CONDITIONS

Short Title	1
Interpretation	1
Application	3

GENERAL

Compliance with the Law	3
Assistance to Designated Officer	4
Access to Right-of-Way of Pipeline	4
Indemnification	4
Emergency Measures	5

PART I - SOCIO-ECONOMIC TERMS AND CONDITIONS

Undertakings	5
Plans	5
Plan Schedule	6
Information and Consultation	6
Pipeline Labour	8
Orientation of Employees	8
Opportunity Measures	9
Business Opportunities	9
Work Camps	10
Health	10
Security	10
Surveillance, Inspection and Monitoring	11
Compensation for Damage to Property	12
Protection of Native Traditional Harvesting and Cultural Areas	13

PART II - ENVIRONMENTAL TERMS AND CONDITIONS

General Terms and Conditions	15
Terrain, Landscape and Waterbodies	15
Prevention of Erosion and Drainage Disturbances	16
Reclamation and Revegetation	16
Air Quality	17
Noise	18

Rare and Endangered Species	19
Wildlife	19
Fisheries	20
Special Interest Areas	22
Agricultural Land	23
Clearing	24
Fuel and Other Hazardous Material	25
Waste Management	26
Granular Materials, Borrow Pits and Quarries	26
Blasting	27
Water Crossings	27
Water Withdrawal, Water Discharge and Hydrostatic Testing	28
Roads and Other Facilities	30
Machinery, Transportation and Construction Equipment	31
Inspection and Monitoring	31
Protection of Shelter Belts	32
Forest and Prairie Fire Prevention and Suppression	32
Environmental Plans and Procedures Manual	32
Submissions	33

INDEX

(i)

INTRODUCTION

This document contains social, economic, and environmental terms and conditions which, under the provisions of the Northern Pipeline Act, have been attached by an Order in Council of January 29, 1981 to the Certificate of Public Convenience and Necessity granted to Foothills Pipe Lines (Sask.) Ltd. for the construction and operation of the Saskatchewan section of the Alaska Highway Natural Gas Pipeline. These terms and conditions reflect several objects of the Act, including:

- (a) facilitating the efficient and expeditious planning and construction of the pipeline;
- (b) minimizing any adverse social and environmental impacts on the areas most directly affected by the pipeline; and
- (c) maximizing the social and economic benefits of this project for the people of the area.

The purpose of these terms and conditions is to give the company direction as to what standards of performance it must achieve in constructing and operating the pipeline. With one exception, they will replace the environmental and socio-economic undertakings made by Foothills before the National Energy Board hearings on the northern gas pipeline insofar as they apply to Foothills Pipe Lines (Sask.) Ltd. Foothills Pipe Lines (Sask.) Ltd. is required to implement the Foothills' undertaking to compensate for hunting and trapping losses due to pipeline activities.

The terms and conditions set out several environmental and socio-economic objectives which the company must attain in the construction and operation of the pipeline. Many of them are cast in general terms and will be interpreted by the Agency in the light of experience gained by the National Energy Board and the Province of Saskatchewan in regulating the construction and operation of gas pipelines in Saskatchewan. Successful construction of many pipelines in the Province over the years has resulted in a wealth of knowledge about the types of adverse impacts which can be anticipated and how best to avoid or mitigate them. Provincial standards are therefore employed in most instances.

(ii)

Two other points were recognized in the development of these terms and conditions:

(a) that the minimization of adverse social or environmental impacts can best be achieved during planning and design of the pipeline, rather than after construction is under way; and

(b) that the Agency, in assessing Foothills' compliance with the terms and conditions, must exercise professional judgement in determining the degree of minimization of adverse impacts that the company must achieve.

Under the terms and conditions the company is required to submit a series of plans for the approval of the designated officer indicating how it intends to proceed. These plans are available to the public in the offices of the Northern Pipeline Agency.

This document was prepared as a result of discussions between representatives of the Province of Saskatchewan and officials of the Northern Pipeline Agency. Comments and advice were also received from Foothills Pipe Lines (Sask.) Ltd., federal government agencies, and the public at large through the Saskatchewan environmental impact review process.

THE SOCIO-ECONOMIC AND ENVIRONMENTAL TERMS AND
CONDITIONS IN RESPECT OF THE CERTIFICATE OF PUBLIC
CONVENIENCE AND NECESSITY DECLARED TO BE ISSUED UNDER
SUBSECTION 20(1) OF THE NORTHERN PIPELINE
ACT TO FOOTHILLS PIPE LINES (SASK.) LTD.
IN RESPECT OF THAT PORTION OF THE
PIPELINE IN THE PROVINCE OF SASKATCHEWAN

Short Title

1. These terms and conditions may be cited as the Northern Pipeline Socio-Economic and Environmental Terms and Conditions for the Province of Saskatchewan.

Interpretation

2. (1) In these terms and conditions,

"Act" means the Northern Pipeline Act;

"agricultural land" means real property owned by a private individual, co-operative, corporation or the Crown that is situated outside a city, town, village or hamlet and that is used or is capable of being used for farming, tillage of the soil, livestock production, raising poultry, dairying, fur farming, tree farming, bee keeping, fish farming or any other activity undertaken to produce agricultural products;

"big game animals" means "big game" as defined in The Wildlife Regulations, 1979 (Saskatchewan);

"borrow pit" means a site used for the extraction of granular material and fill and the excavation resulting from such extraction;

"certified status" has the same meaning as in the Seeds Regulations;

"construction" means, in respect of the building of the pipeline or any portion thereof, those field activities carried out by Foothills from the commencement of clearing for the pipeline for any portion thereof, until leave to open the pipeline or any portion thereof, as the case may be, is granted by the Board but does not include clearing for survey lines by Foothills;

"environmental impact" means any change in the existing physical or biological conditions of the environment resulting from the construction or operation of the pipeline;

"facility" means any fixed installation of a temporary or permanent nature installed by Foothills as a part of the pipeline or used by Foothills in the construction or operation of the pipeline;

"fish" means "fish" as defined in the Fisheries Act;

"Foothills" means Foothills Pipe Lines (Sask.) Ltd.;

"fuel" means all liquid or gaseous hydrocarbons and petroleum products used in the construction and operation of the pipeline;

"hazardous material" means any chemical, explosive, toxic material or other substance that, if spilled, misused or allowed to escape, may cause significant damage to the environment;

"Indian" means a person who, pursuant to the Indian Act, is registered as an Indian or is entitled to be registered as an Indian;

"inspection" means observation and measurement by Foothills to verify that

(a) the construction and operation of the pipeline accord with the designs and specifications of the pipeline, and

(b) these terms and conditions are complied with;

"livestock" means animals, including birds, kept or dealt in for use or profit;

"monitoring" means data gathering, data analysis and interpretation and data presentation to determine magnitudes and characteristics of environmental change;

"operation" means any field activity by Foothills relating to the pipeline or any portion of the pipeline for which leave to open has been granted;

"Province" means the Province of Saskatchewan;

"recreation site" means a recreational site identified under The Provincial Parks, Protected Areas, Recreation Sites and Antiquities Act (Saskatchewan);

"visual resources" means the appearance of the features that make up the visible landscape including land, water, vegetation and wildlife;

"waste" means discarded or abandoned liquid or solid matter including human waste, garbage, oil drums, petroleum products, ashes and equipment;

"waterbodies" means lakes and ponds and permanent and seasonal rivers and streams;

"wildlife" means "wildlife" as defined in The Wildlife Act (Saskatchewan).

(2) All other words and expressions have the same meaning as in the Act.

Application

3. These terms and conditions are added to the terms and conditions set out in Schedule III to the Act and shall apply to Foothills but, unless the context otherwise requires, shall only apply to the construction and operation of the pipeline by Foothills in the Province.

GENERAL

Compliance with the Law

4. Foothills shall, in the construction and operation of the pipeline, comply with the laws of Canada and the laws of the Province.

5. (1) Subject to subsection (2), Foothills shall, when entering into any contract with a contractor for the construction or operation of the pipeline, require as a condition of such a contract that the contractor or any subcontractor of that contractor observe and comply with these terms and conditions.

(2) Where an application is made by Foothills to the designated officer to exempt Foothills from the requirement referred to in subsection (1) in respect of the observing of or compliance with any provision of Part I, the designated officer may exempt Foothills from that requirement in respect of that provision.

(3) Foothills shall be responsible for any breach of these terms and conditions by a contractor referred to in subsection (1) or any subcontractor of that contractor as if the breach had been committed by Foothills.

Assistance to Designated Officer

6. When requested by the designated officer, Foothills shall give the designated officer any reasonable assistance that he may require to carry out his duties in respect of the pipeline and shall furnish him with such information in respect of the construction or operation of the pipeline as he may request.

Access to Right-of-Way of Pipeline

7. Employees or agents of the government of the Province shall, for the purpose of carrying out their duties in respect of the pipeline, be allowed reasonable access to any part of the right-of-way of the pipeline or any other area where the pipeline is being or is to be constructed.

Indemnification

8. Foothills shall, at all times, save harmless and indemnify and keep her Majesty indemnified against and be responsible for all claims, demands, actions, suits, costs or other legal proceedings made or brought against Her Majesty by reason of or arising out of

(a) the construction or operation of the pipeline;

(b) the escape, ignition or explosion, for any cause, of gas or related hydrocarbons from or in the pipeline on the lands of Her Majesty;

(c) any act or omission on the part of Foothills, its contractors and their subcontractors and its or their officers, servants, agents or employees in respect of or in relation to the pipeline on the lands of Her Majesty, including the construction or operation of the pipeline; and

(d) any act or omission on the part of any officer, servant, agent or employee of Her Majesty in respect of or in relation to the pipeline on the lands of Her Majesty, not including such acts or omissions as would in law constitute gross negligence.

9. Foothills shall, at all times, pay to Her Majesty, the amount of any loss or damage that has been suffered or sustained by Her Majesty by reason of or arising out of the matters set out in section 8.

Emergency Measures

10. Prior to the commencement of construction Foothills shall establish emergency procedures satisfactory to the designated officer to deal with any emergency arising from the construction or operation of the pipeline that may adversely affect the environment or persons who reside in the vicinity of the pipeline.

11. Foothills shall, to the satisfaction of the designated officer, designate and train persons working on the pipeline to carry out the emergency procedures referred to in section 10.

12. Foothills shall take measures to maintain equipment and supplies intended to use in dealing with emergencies in proper working order.

13. Where any emergency arises in the course of construction or operation of the pipeline, Foothills shall forthwith advise the designated officer of the emergency and of the measures taken to deal with it.

PART I

SOCIO-ECONOMIC TERMS AND CONDITIONS

Undertakings

14. Where Foothills gives an undertaking to the government or to any community or organization referred to in subsection 21(1) during consultations required by that section and the undertaking is accepted by that government, community or organization, Foothills shall, unless otherwise directed by the designated officer within thirty days of the giving of the undertaking, comply with that undertaking.

Plans

15. (1) Subject to subsection (2), where, pursuant to this Part, Foothills is required to submit a plan in respect of any matter to the designated officer for his approval, that plan, when approved, shall constitute Foothills' plan for that matter and Foothills shall comply therewith.

(2) The designated officer may, on giving Foothills reasonable notice in writing, modify or vary any provision set out in a plan referred to in subsection (1) and Foothills shall comply with the plan as so modified or varied.

Plan Schedule

16. (1) Foothills shall, within thirty days of the coming into force of this Part or at such later date as may be fixed by the designated officer, submit to the designated officer for his approval a plan schedule that sets out the date each plan referred to in subsection 15(1) is to be submitted to the designated officer.

(2) The plan schedule referred to in subsection (1), when approved by the designated officer, constitutes Foothills' plan schedule and Foothills shall comply therewith.

(3) The designated officer may, at the request of Foothills, modify or vary the plan schedule referred to in subsection (2).

Information and Consultation

17. (1) Foothills shall provide information in respect of the planning and construction of the pipeline to

- (a) the Government of Canada;
- (b) the government of the Province;
- (c) communities situated in the vicinity of the pipeline;
- (d) Indian, Metis and non-status Indian organizations in the Province;
- (e) Indian Bands and Metis Locals; and
- (f) any special interest group requesting such information except a special interest group that does not have, in the opinion of Foothills or the designated officer, a bona fide need for the information.

(2) The information referred to in subsection (1) shall be provided in a form and manner satisfactory to the designated officer and shall include information in respect of

- (a) the route alignment and construction schedules of the pipeline;
- (b) the anticipated impact of the pipeline on the communities situated in the vicinity of the pipeline;
- (c) the potential opportunities resulting from the construction of the pipeline for the residents in the vicinity of the pipeline;
- (d) the proposed use of any land or waterbody;
- (e) any significant adverse environmental impact resulting from the construction of the pipeline;
- (f) the opportunities referred to in sections 29 and 30;
- (g) the opportunity for businesses in the Province to participate in the supply of goods and services for the pipeline; and
- (h) any other matter specified by the designated officer.

18. Foothills shall facilitate public access to the information referred to in section 17 and shall ensure that those communities situated in the vicinity of the pipeline have access to the information.

19. Foothills shall consult with the government of the Province, communities in the vicinity of the pipeline, Indian, Metis and non-status Indian organizations in the Province and any special interest group in the Province, on the request of that group, to ascertain their requirement for information.

20. Where a public meeting, workshop or seminar is convened in a community in the vicinity of the pipeline for the purpose of disseminating information in respect of the pipeline, Foothills shall, when directed by the designated officer, provide informed persons to assist in the dissemination of such information.

21. (1) Where Foothills receives a direction from the designated officer to consult with the government of the Province, any community in the vicinity of the pipeline or any Indian, Metis or non-status Indian organization in the Province in respect of any matter in connection with the construction or operation of the pipeline, Foothills shall, within thirty days of receiving such direction, consult with that government, community or organization.

(2) Foothills shall report to the designated officer the significant results of any consultation pursuant to subsection (1).

22. Where Foothills, at any time, consults with any contractor or labour organization in respect of any matter critical to construction progress, Foothills shall report the significant results of such consultation to the designated officer.

23. Foothills shall identify and make available a person to assist Foothills in

- (a) disseminating the information referred to in section 17;
- (b) arranging consultations with communities situated in the vicinity of the pipeline; and
- (c) performing any liaison function with such communities.

24. Foothills shall submit to the designated officer for his approval a plan, to be known as the information plan, that sets out the manner in which Foothills intends to carry out the provisions of sections 17 to 19 and sections 22 and 23.

Pipeline Labour

25. Foothills shall, in the preparation and implementation of the detailed manpower plan referred to in paragraph 9(a) of Schedule III to the Act, consult with the government of the Province and labour organizations in the Province in respect of the plan and the recruitment and training of employees to be used in the construction and operation of the pipeline.

26. Foothills shall, in consultation with the Government of Canada and the government of the Province, take such measures as are satisfactory to the designated officer to discourage the migration of persons seeking work on the pipeline into any area in the vicinity of the pipeline.

Orientation of Employees

27. Foothills shall, in respect of those persons who commence work on the construction of the pipeline, carry out an orientation program that includes environmental information, to assist such persons to become familiar with their working conditions and to become aware of the potential to damage the environment.

28. Foothills shall, following consultation with the government of the Province, submit to the designated officer for his approval a plan, to be known as the orientation plan, that sets out the manner in which Foothills intends to carry out the provisions of section 27.

Opportunity Measures

29. Foothills shall

(a) ensure that Indian, Metis and non-status Indian people have access to training and employment opportunities in respect of the construction or operation of the pipeline;

(b) ensure that women have access to employment opportunities in respect of the construction or operation of the pipeline; and

(c) provide appropriate support measures in relation to training, recruitment and employment practices to meet any special needs of women and of Indian, Metis and non-status Indian people to enable them to take maximum advantage of the opportunities referred to in paragraphs (a) and (b).

30. Foothills shall ensure that Indian, Metis and non-status Indian people of the Province have a fair and competitive opportunity to participate in the supply of goods and services for the pipeline.

31. Foothills shall, following consultation with Indian, Metis and non-status Indian organizations in the Province, and, when directed by the designated officer, women's organizations in the Province, submit to the designated officer for his approval a plan, to be known as the opportunity measures plan, that sets out the manner in which Foothills intends to carry out the provisions of sections 29 and 30.

Business Opportunities

32. Foothills shall provide businesses in the Province with a fair and competitive opportunity to supply goods and services for the pipeline.

33. Foothills shall cooperate with the government of the Province in that government's program in assisting businesses in the Province that are seeking to supply goods and services for the pipeline.

34. Foothills shall, following consultation with the government of the Province, submit to the designated officer for his approval a plan, to be known as the business opportunities plan, that sets out the manner in which Foothills intends to carry out the provisions of sections 32 and 33.

Work Camps

35. Where Foothills establishes a work camp in the Province for the construction of the pipeline in that Province, it shall notify the government of the Province not less than ninety days in advance of the establishment of the work camp of the location and size of the work camp and the period for which it shall be used.

Health

36. Foothills shall ensure that the health of all persons employed on or in connection with the construction of the pipeline is safeguarded by the implementation of generally accepted public health standards.

37. Foothills shall, in consultation with the government of the Province, ensure that proper facilities are provided and arrangements are made for adequate care and treatment of any ill or injured person employed on or in connection with the construction or operation of the pipeline.

Security

38. Foothills, in consultation with the Government of Canada, the government of the Province and the Royal Canadian Mounted Police, shall

- (a) maintain security on the pipeline; and
- (b) cooperate with and give assistance to the Royal Canadian Mounted Police to enable the Royal Canadian Mounted Police to carry out its law enforcement duties.

39. For the purpose of promoting effective law enforcement in the area through which the pipeline passes, Foothills, in consultation with the Royal Canadian Mounted Police, shall

(a) provide the Royal Canadian Mounted Police with immediate access to the pipeline and to persons employed in the construction or operation of the pipeline;

(b) provide sufficient information to enable the Royal Canadian Mounted Police to establish

(i) the nature and extent of the policing required on the pipeline;

(ii) a working arrangement between Foothills' security personnel and the Royal Canadian Mounted Police; and

(iii) a system of reporting on policing matters.

40. Foothills shall not permit the possession by any person employed in the construction of the pipeline of a firearm or game hunting device

(a) on any portion of the pipeline right-of-way where construction activity has commenced, or

(b) at any time in a campsite established by Foothills or on any property, vehicle or aircraft of Foothills

unless authorized, in writing, by the designated officer.

Surveillance, Inspection and Monitoring

41. Foothills shall ensure the maintenance and availability, for examination at any time by the Agency, of such of its records pertaining to its activities in the Province as may be required by the Agency to determine compliance with this Part.

42. Foothills shall report to the Agency, at such times as may be required by the designated officer, on the measures that have been taken by Foothills in complying with this Part.

43. (1) Foothills, when directed by the designated officer, shall undertake special studies of the socio-economic impact of the pipeline.

(2) Every special study referred to in subsection (1) shall be forwarded to the Agency on its completion.

44. Foothills shall

- (a) establish procedures and allocate resources for the purpose of assessing the effectiveness of its compliance with this Part; and
- (b) on the request of the designated officer, assess the effectiveness of its compliance with this Part and report the assessment to the Agency.

Compensation for Damage to Property

45. Foothills shall be liable for any damage to property directly or indirectly caused by Foothills, a contractor of Foothills or a subcontractor of that contractor in connection with or resulting from their activities in the construction or operation of the pipeline.

46. Where, in the course of construction or operation of the pipeline, any damage is either directly or indirectly caused by Foothills, a contractor of Foothills or a subcontractor of that contractor to any property, other than the property of Foothills, a contractor of Foothills or a subcontractor of that contractor, Foothills shall

- (a) immediately take action to prevent further damage;
- (b) immediately inform the owner of the property of the nature of the damage; and
- (c) arrange, as soon as possible, for
 - (i) compensation,
 - (ii) the repair of the damage, or
 - (iii) the replacement of the damaged property.

47. Foothills shall submit to the designated officer, in a manner determined by him, information in respect of any unresolved matter referred to in paragraph 46(c).

48. Where

- (a) Foothills and a claimant against Foothills fail to agree as to liability or compensation for damage for which the claimant alleges Foothills is responsible, and

(b) the claimant referred to in paragraph (a) agrees with Foothills

(i) to enter into an arbitration submission governed by the provisions of The Arbitration Act (Saskatchewan), and

(ii) that a decision of the arbitrator is binding and conclusive,

Foothills shall enter into such arbitration submission and shall pay all costs of and incidental to any arbitration proceedings pursuant thereto, except where the arbitrator determines that the claim is frivolous.

Protection of Native Traditional Harvesting
and Cultural Areas

49. (1) Foothills shall, following consultation with the government of the Province and Indian, Metis and non-status Indian organizations in the Province, submit to the designated officer, in a manner and form satisfactory to him, an inventory that sets out

(a) the hunting, trapping and fishing areas used by the Indian, Metis or non-status Indian people in the vicinity of the pipeline, and

(b) any area of cultural importance to Indian, Metis or non-status Indian people in the vicinity of the pipeline, and

a resource use analysis of such hunting, trapping and fishing areas.

(2) The resource use analysis referred to in subsection (1) shall consist of information on the seasonal use of hunting, trapping and fishing areas.

50. In locating the pipeline or any portion thereof, Foothills shall, following consultation with the government of the Province and Indian, Metis and non-status Indian organizations in the Province, locate the pipeline in a manner that minimizes, to the satisfaction of the designated officer, interference with the hunting, trapping and fishing areas and areas of cultural importance set out in the inventory referred to in section 49.

51. In proposing the construction schedule in respect of the pipeline or any portion thereof, Foothills shall, following consultation with the government of the Province and Indian, Metis and non-status

Indian organizations in the Province, propose a schedule that minimizes, to the satisfaction of the designated officer,

(a) any conflict with the seasonal use of hunting, trapping and fishing areas, and

(b) the disturbance of areas of cultural importance

set out in the inventory referred to in section 49.

52. Foothills shall, if directed by the designated officer, submit to him for his approval a plan, to be known as the traditional resource protection plan, that sets out the manner in which Foothills intends to carry out the provisions of sections 50 and 51.

PART II

ENVIRONMENTAL TERMS AND CONDITIONS

General Terms and Conditions

53. Foothills shall

(a) plan and construct the pipeline efficiently and expeditiously; and

(b) minimize to the extent possible any adverse environmental impact.

54. Where, in this Part, Foothills is required to make plans, take measures or implement procedures in respect of the environment, Foothills shall

(a) incorporate in such plans, measures and procedures those environmental practices and measures ordinarily followed in constructing and operating pipelines in the Province; and

(b) comply with those standards established under the laws of the Province that are applicable to any pipeline constructed and operated under the laws of the Province except where such standards are inconsistent with the Act, any terms and conditions made thereunder or any other law of Canada.

Terrain, Landscape and Waterbodies

55. (1) Foothills shall minimize, to the satisfaction of the designated officer, the areas of land and the waterbodies to be used in the construction of the pipeline and the physical disturbance of any land or waterbody so used.

(2) Foothills shall take measures in the planning and construction of the pipeline to minimize, to the satisfaction of the designated officer, any adverse environmental impact on land through which the pipeline passes and on waterbodies or groundwater in the vicinity of the pipeline.

56. Where Foothills proposes a location of the pipeline or a portion thereof to the designated officer for approval it shall, in a manner satisfactory to the designated officer, take into account the effect, if any, of the construction or operation of the pipeline on the

existing or potential uses of any land or waterbody or any sandy terrain with a thin layer of topsoil through which the pipeline is proposed to pass.

Prevention of Erosion and Drainage Disturbances

57. Foothills submit to the designated officer information in respect of those areas in which, and the periods of time in respect of those areas during which, the terrain through which the pipeline will pass may be particularly sensitive to erosion.

58. Foothills shall, in the planning and construction of the pipeline, take such measures as are satisfactory to the designated officer to minimize the amount of construction in any area and during any period in respect of that area described in the information referred to in section 57.

59. Foothills shall design and implement such erosion control measures as are satisfactory to the designated officer to protect the pipeline, minimize interference with any other use of land or water and to protect the environment of any area through which the pipeline passes.

Reclamation and Revegetation

60. Foothills shall implement such measures as are satisfactory to the designated officer to reclaim land, other than land used for the production of cereal crops, disturbed by the construction or operation of the pipeline to a level of productivity equal to or greater than that existing before construction.

61. Foothills shall take measures to revegetate land to the satisfaction of the designated officer, other than land used for the production of cereal crops, disturbed by the construction or operation of the pipeline as soon as practicable and in a manner that complements any other measures Foothills takes to control drainage and erosion.

62. Where land is to be revegetated pursuant to section 61, Foothills shall revegetate such land with species of plants similar to the species disturbed or, where it is not possible to revegetate with such species of plants, Foothills shall use seeds of certified status, satisfactory to the designated officer.

63. Where land is to be reclaimed pursuant to section 60 or revegetated pursuant to section 61, Foothills shall give priority to the following objectives:

- (a) the control or erosion and its impact, and
- (b) the restoration of the aesthetic value of the land and its grazing or forage production capabilities

and such priority shall be given in the order set out in paragraphs (a) and (b).

64. (1) Foothills shall from time to time inspect the erosion control measures referred to in section 59, the reclamation measures in section 60 and the revegetation measures referred to in section 61 and evaluate the effectiveness of such measures.

(2) Where, in the opinion of the designated officer, the measures referred to in subsection (1) are ineffective, Foothills shall implement such remedial measures as are satisfactory to the designated officer.

Air Quality

65. Where Foothills submits to the designated officer for his approval proposals for the design and location of a compressor station for the pipeline, Foothills shall, in a manner satisfactory to the designated officer, include in the submission the measures it proposes

- (a) to control air pollution and, where possible, reduce any ice fog resulting from the operation of the pipeline; and
- (b) to preserve the aesthetic value of the landscape in the vicinity of the pipeline.

66. Foothills shall, in the operation of a compressor station, take such measures as are satisfactory to the designated officer to minimize any adverse effects of air pollution and ice fog resulting from the operation of the pipeline on

- (a) the health or recreation of any person;
- (b) transportation; and
- (c) livestock.

67. (1) Foothills shall, at each compressor station selected by the designated officer, sample and analyze air quality in the vicinity of that compressor station by a method and at times satisfactory to the designated officer.

(2) Foothills shall report to the designated officer, when requested by him, the results of the sampling and analysis referred to in subsection (1).

Noise

68. Foothills shall incorporate noise abatement devices in the design of any compressor station it installs for the pipeline.

69. Foothills shall, in the construction and operation of the pipeline, take such noise abatement measures as are satisfactory to the designated officer to minimize the disturbance by noise of

(a) persons residing in the vicinity of the pipeline;

(b) wildlife, referred in section 72, whose existence is threatened in the areas of land and waterbodies set out in the information referred to in that section during the periods of time described in the information with respect to such wildlife; and

(c) any livestock kept in a confined area in the vicinity of the pipeline right-of-way prior to the construction of the pipeline.

70. (1) Foothills shall, when requested by the designated officer and in a manner satisfactory to him, record noise levels caused by the operation of pipeline facilities and equipment and shall report, within a reasonable period of time, the noise levels so recorded to the designated officer.

(2) Where, in the opinion of the designated officer, any noise level reported to him pursuant to subsection (1) disturbs or is likely to disturb the persons, wildlife or livestock referred to in section 69, Foothills shall take such remedial measures as are satisfactory to the designated officer.

Rare and Endangered Species

71. Where, in any area through which the pipeline passes, there is any species of flora or fauna that, in the opinion of the designated officer,

- (a) exists in such small numbers or exists in such a restricted area that its survival is threatened,
- (b) is likely to become endangered unless the factors affecting its vulnerability are not reversed, or
- (c) is threatened with immediate extinction through all or a significant portion of its range owing to the action of man,

and which may be threatened by the construction or operation of the pipeline, Foothills shall take such measures as are satisfactory to the designated officer to minimize any impact on such area that may have an adverse effect on such species.

Wildlife

72. Foothills shall, when requested by the designated officer and following consultation with the government of the Province, submit to him information satisfactory to him in respect of those areas of land and waterbodies in which, and the periods of time in respect of those areas and waterbodies during which, the construction or operation of the pipeline may

- (a) threaten the continued existence of significant wildlife populations; or
- (b) result in significant adverse effects on significant wildlife populations.

73. Foothills shall, in a manner satisfactory to the designated officer, prepare construction schedules for the pipeline and propose the location of the pipeline in such a manner that when the construction of the pipeline is being carried out the adverse impact on wildlife in any area and during any periods of time in respect of that area described in the information referred to in section 72 is minimized.

74. Foothills shall take such measures as are satisfactory to the designated officer

(a) to prevent big game animals from being obstructed or entrapped by the construction of the pipeline; and

(b) to prevent unreasonable interference with trapping in the vicinity of the pipeline.

75. (1) Foothills shall, from time to time during construction of the pipeline, inspect those areas described in the information referred to in paragraph 72(a).

(2) Foothills shall, in carrying out an inspection referred to in subsection (1), evaluate the effectiveness of its measures to mitigate any adverse impact on wildlife and shall, when requested by the designated officer, report to him the results of the evaluation.

76. Where, in the opinion of the designated officer,

(a) the proposed location of the pipeline or the construction schedule of the pipeline referred to in section 73 is such that it does not minimize the adverse impact on wildlife, or

(b) the measures taken pursuant to paragraph 74(a) are ineffective,

Foothills shall take such remedial measures as are satisfactory to the designated officer.

Fisheries

77. (1) Foothills shall, when requested by the designated officer and following consultation with the government of the Province, submit to him information satisfactory to him in respect of those areas of fish habitat in which, and the periods of time in respect of those areas during which, the construction or operation of the pipeline may threaten the continued existence of significant fish populations.

(2) The areas referred to in subsection (1) shall include fish habitat, as those words are defined in the Fisheries Act for the purposes of sections 31, 33, 33.1 and 33.2 of that Act, in the waterbodies through which the pipeline passes.

(3) The periods of time referred to in subsection (1) shall include those periods for the spawning, incubation, emergence and migration of fish.

78. Foothills shall in a manner satisfactory to the designated officer prepare construction schedules for the pipeline to ensure that when the construction of the pipeline is being carried out the adverse impact on the fish in any fish habitat and during any periods of time in respect of that habitat described in the information referred to in subsection 77(1) is minimized.

79. Where the pipeline or any facility is

- (a) scheduled to be constructed at a time, or
- (b) located at a place

that may be disruptive to fish, Foothills shall take such measures as are satisfactory to the designated officer to avoid or minimize, to the satisfaction of the designated officer, any adverse effects on fish and fish habitat.

80. Foothills shall implement construction and operation practices to protect, to the extent practicable, fish and fish habitat against any adverse effects of siltation, excavation of granular materials, spills of fuel or toxic chemicals, changes in water temperature and chemistry or the reduction of dissolved oxygen in any waterbody through which the pipeline passes.

81. (1) Foothills shall not, during the construction of the pipeline, unless permitted by the designated officer, during any period described in the information referred to in subsection 77(1) withdraw water from overwintering areas or from groundwater directly replenishing those areas.

(2) Where Foothills, in constructing the pipeline, obstructs fish migration routes by any blockage, diversion or prolonged acceleration of water flow, Foothills shall install devices to ensure the passage of such fish.

82. Foothills shall take such measures as are satisfactory to the designated officer to ensure that the construction and operation of the pipeline does not unreasonably interfere with any domestic, sport or commercial fishing.

83. Foothills shall inspect pipeline stream crossings for evidence of deterioration in bank stability and stream bed condition and, where required by the designated officer, take such measures as are satisfactory to him to mitigate any adverse environmental impact thereon.

Special Interest Areas

84. Prior to the commencement of construction, Foothills shall conduct, in a manner satisfactory to the designated officer, a historic resources investigation program in respect of the area through which the pipeline passes.

85. (1) Foothills shall, in consultation with the government of the Province, identify each area of natural or cultural significance in the vicinity of the proposed route of the pipeline and shall propose a location of the pipeline that, insofar as possible, does not pass through that area.

(2) Where the location referred to in subsection (1) of the pipeline passes through an area identified under that subsection and the location of the pipeline has been approved by the designated officer, Foothills shall take such measures as are satisfactory to the designated officer to protect or salvage the natural and cultural values of that area.

86. Foothills shall take such measures as are satisfactory to the designated officer to minimize the adverse impact of the construction of the pipeline within 2 km of the limits of any park, wildlife or game sanctuary, ecological reserve, International Biological Program candidate area, historical or archaeological site, any vertebrate palaeontological site or any research, conservation or recreation site proposed or established under any law of Canada or of the Province.

87. Foothills shall obtain the approval of the designated officer before commencing the construction of any portion of the pipeline within 30 m of a monument or burial ground.

88. Foothills shall establish and conduct a program satisfactory to the designated officer to

(a) identify and protect or excavate, salvage and investigate archaeological sites and vertebrate palaeontological sites, and

(b) analyze the archaeological and associated palaeoecological materials and vertebrate fossils

on land used for or disturbed by the construction of the pipeline.

89. Foothills shall provide, when requested by the designated officer, evidence satisfactory to the designated officer that any archaeological and related materials, field notes, plans and maps, photographs, analyses and other relevant documents collected during the program referred to in section 88 are deposited with the government of

the Province or are retained at a place and under such arrangements as are approved by that government.

90. (1) In constructing the pipeline, Foothills shall avoid, where practicable, disturbance of geodetic or legal survey monuments.

(2) Where a geodetic monument is disturbed in the course of construction of the pipeline, Foothills shall report such disturbance forthwith to the designated officer.

(3) Where a geodetic monument is disturbed, Foothills shall, at its expense and in accordance with the instructions of the Dominion Geodesist, cause the monument to be restored or re-established.

Agricultural Land

91. (1) Foothills shall take such measures as are satisfactory to the designated officer to avoid adverse environmental impacts on agricultural land.

(2) Where any adverse environmental impact on agricultural land cannot be avoided, Foothills shall take such measures as are satisfactory to the designated officer to mitigate such impact.

92. (1) Where soil on agricultural land is disturbed or removed during construction of the pipeline Foothills shall,

(a) unless otherwise directed by the landowner or tenant of the land, as soon as possible after the disturbance or removal, take such measures as are satisfactory to the landowner or tenant to stabilize the surface or replace such soil of such agricultural land and return the land, as far as practicable, to its previous level of productivity; and

(b) avoid mixing topsoil with subsoil and placing rocks in the tillage zone.

93. Foothills shall, in carrying out any measures pursuant to section 91 or 92, ensure that any revegetation is designed to be compatible with existing agricultural uses.

94. Where Foothills has stabilized the surface of agricultural land and returned it as far as practicable to its previous level of productivity pursuant to paragraph 92(1)(a), and where required by the designated officer, Foothills shall

(a) inspect agricultural land that may have been or may be affected by the construction of the pipeline; and

(b) take remedial measures in respect of any agricultural land discovered by the inspection to be affected by the construction of the pipeline.

95. Where, as a consequence of the construction of the pipeline, a fence or gate is damaged or destroyed by Foothills, Foothills shall, in consultation with the owner of the land on which the fence or gate is situated or the tenant thereof, repair or replace that fence or gate.

96. Where Foothills requires access to the pipeline for the purpose of maintenance through land that is fenced, Foothills shall, in consultation with the owner or tenant, construct and maintain a gate in the fence for such access.

Clearing

97. Foothills shall minimize to the satisfaction of the designated officer any adverse environmental impact of any vegetation clearing operations by Foothills, including such impact on erosion-sensitive terrain.

98. Foothills shall, in respect of the construction of the pipeline,

(a) clear vegetation from only those areas essential for the construction;

(b) when required by the designated officer, leave a buffer strip, satisfactory to him, of undisturbed vegetation

(i) between any area cleared of vegetation and an adjacent waterbody; and

(ii) between any area cleared of vegetation and an adjacent road; and

(c) promptly remove any debris entering or likely to enter any waterbody as a result of the clearing of vegetation by Foothills.

99. Foothills shall dispose of any debris resulting from the clearing of vegetation by Foothills in such manner as is satisfactory to the designated officer.

100. Foothills shall take such measures as are satisfactory to the designated officer to minimize the impact of clearing operations on visual resources.

Fuel and Other Hazardous Material

101. (1) Foothills shall, in consultation with the government of the Province, establish a list setting out those persons designated by Foothills to receive notification from Foothills in respect of fuel or other hazardous material that has been spilled by Foothills during the construction or operation of the pipeline.

(2) Foothills shall forthwith submit to the designated officer the names of the persons set out in the list referred to in subsection (1).

102. Foothills shall

(a) establish procedures satisfactory to the designated officer to minimize the possibility of an accident occurring during the storage, handling and use of fuel or any other hazardous material;

(b) locate storage and handling sites for fuel and hazardous material to minimize any contamination of any waterbody described in the information referred to in section 72, any fish habitat described in the information referred to in section 77 or any harvesting area for aquatic or terrestrial fauna; and

(c) establish procedures satisfactory to the designated officer to contain and clean up any fuel or other hazardous material spilled, misused or allowed to escape.

103. (1) Where Foothills uses a fuel storage area containing any above ground tank exceeding 4600 l in capacity, Foothills shall surround that area by a dyke of reinforced concrete or a dyke of earth lined with plastic or other impervious material.

(2) Where a dyke is required pursuant to subsection (1), Foothills shall submit to the designated officer a typical design of that dyke for approval.

104. (1) Foothills shall inspect, in a manner satisfactory to the designated officer, facilities used by Foothills to handle and store fuel and other hazardous material to determine whether there has been any loss of such fuel or hazardous material.

(2) Where any loss of fuel or other hazardous material referred to in subsection (1) occurs, Foothills shall investigate the cause of such loss and take such measures as are satisfactory to the designated officer to clean up any spill resulting from such loss and to prevent further loss.

Waste Management

105. (1) Foothills shall ensure that liquid or solid wastes produced as a consequence of the construction, operation or abandonment of the pipeline are collected and, where directed by the designated officer, treated in a manner satisfactory to him.

(2) Foothills shall dispose of the liquid and solid wastes referred to in subsection (1) in a manner satisfactory to the designated officer.

106. Foothills shall establish procedures satisfactory to the designated officer to prevent access by wildlife to waste disposal sites, incinerator sites or other waste storage or treatment sites and to minimize the attraction of wildlife to such sites.

107. Foothills shall handle and dispose of any wastes containing a hazardous material in such manner as is satisfactory to the designated officer.

108. (1) Where required by the designated officer, Foothills shall

(a) inspect the operation of its liquid waste treatment facilities and the quantity and composition of effluent discharge therefrom; and

(b) evaluate the effectiveness of its solid waste management procedures.

(2) Foothills shall take such remedial measures in respect of solid waste management and liquid waste treatment as directed by the designated officer.

Granular Materials, Borrow Pits and Quarries

109. Where Foothills uses a borrow pit or quarry, Foothills shall minimize to the satisfaction of the designated officer

- (a) the disturbance of the environment in the vicinity of the borrow pit or quarry;
- (b) the amount of land used for the borrow pit or quarry; and
- (c) the amount of materials extracted from the borrow pit or quarry.

110. Foothills shall, in a manner satisfactory to the designated officer, close or reclaim any borrow pit or quarry used by it.

111. Foothills shall leave a buffer strip of undisturbed vegetation of a width that is satisfactory to the designated officer between any borrow pit or quarry that it opens and any adjacent road.

112. Where Foothills uses a borrow pit or quarry within or adjacent to a waterbody, swamp, marsh, bog or fen, Foothills shall take such measures as are satisfactory to the designated officer to protect wildlife, wildlife habitat and fish and fish habitat in that waterbody, swamp, marsh, bog or fen, as the case may be.

Blasting

113. Foothills shall establish blasting procedures and schedules satisfactory to the designated officer to minimize

(a) any adverse effects on aquatic organisms, wildlife or livestock; and

(b) any interference with hunting, trapping, farming or grazing, in the area through which the pipeline passes.

114. Foothills shall minimize, to the extent possible, blasting in or adjacent to any waterbody, swamp, marsh, bog or fen.

115. Where Foothills intends to blast, it shall advise persons living in the vicinity of its intention and of the time of intended blasting.

Water Crossings

116. Foothills shall, when submitting construction schedules to the designated officer for his approval and when constructing the

pipeline, take into account any particular environmental characteristics of any water crossing by the pipeline.

117. Where Foothills submits a site-specific design for a water crossing to the designated officer for approval, Foothills shall include in such submission information on the hydrological and geotechnical conditions at that crossing that was used by Foothills in preparing the design.

118. Foothills shall, unless otherwise directed by the designated officer, on completion of any construction across a stream, restore in a manner satisfactory to the designated officer the natural drainage of the area affected by such construction.

119. Where water at any place where the pipeline crosses a waterbody is required by

(a) persons who are licensed or authorized by the government of the Province to use such water;

(b) holders of riparian rights; or

(c) the Government of Canada and the government of the Province for international or interprovincial obligations in respect of water,

Foothills shall not, during the construction or operation of the pipeline, interfere with the quality, quantity or level of that water.

120. Foothills shall, in a manner satisfactory to the designated officer, regularly inspect and, when requested by the designated officer, monitor each place where the pipeline crosses a waterbody.

Water Withdrawal, Water Discharge and Hydrostatic Testing

121. Foothills shall, prior to withdrawing, diverting or impounding quantities of water from or discharging quantities of water into any waterbody or groundwater system, ensure to the satisfaction of the designated officer that water withdrawals and discharges will not have an unreasonably adverse effect on

(a) the level or rate of flow of water in the waterbody or well from which the water withdrawal is made or into which the discharge is made;

(b) the existing use of water from the waterbody from which the water withdrawal is made or into which the discharge is made;

(c) the transportation on or access to the waterbody from which the water withdrawal is made or into which the discharge is made;

(d) the trapping or fishing by persons residing in the vicinity of the pipeline;

(e) the fish populations in or dependent on the waterbody from which the water withdrawal is made or into which the discharge is made;

(f) any waterfowl or mammal populations using any waterbody or its margins from which the water withdrawal is made or into which the discharge is made;

(g) the rights of persons to water where those rights have been granted by the government of the Province; and

(h) any international or interprovincial obligations of the Government of Canada or of the government of the Province.

122. (1) Foothills shall, when designing or operating a camp water system, compressor station water system, granular material washing system or any other water related system, design or operate the system, as the case may be, in a manner that will minimize the use of water.

(2) Foothills shall, when carrying out hydrostatic testing of the pipeline, carry out such tests in a manner that will minimize the use of water.

123. Foothills shall appoint a qualified person to supervise the withdrawal or discharge of water used for constructing or testing the pipeline.

124. Foothills shall, in a manner satisfactory to the designated officer, provide site-specific information in respect of each water withdrawal or discharge used for constructing or testing the pipeline.

125. Foothills shall take such measures as are satisfactory to the designated officer

(a) to avoid spilling any test fluid other than a spill caused by the failure of a pipe when being tested; and

(b) to contain and remedy the effect of any test fluid that has been spilled.

126. Foothills shall, prior to discharging any hydrostatic test fluid, ensure that the fluid meets such standards of composition as are satisfactory to the designated officer.

127. Where Foothills obtains water from

- (a) the South Saskatchewan River basin or sub-basin;
- (b) the Cypress Hills basin or sub-basin;
- (c) the Missouri River and its basin or sub-basin; or
- (d) the Old Wives Lake basin or sub-basin

for use in hydrostatic testing, the water shall be returned to the basin or sub-basin from which it was obtained unless the designated officer permits or directs Foothills to discharge the water, in a manner satisfactory to him, into any other basin or sub-basin.

128. (1) Foothills shall conduct all hydrostatic tests of the pipeline in the presence of the designated officer or his authorized representative.

(2) Foothills shall appoint qualified personnel to supervise all hydrostatic tests of the pipeline.

Roads and Other Facilities

129. Foothills shall, wherever possible, use existing roads in the construction and operation of the pipeline.

130. Foothills shall, in the design, construction or operation of any access road or facility, other than an access road or facility located in the right-of-way of the pipeline, take into account, in a manner satisfactory to the designated officer, the local and regional environment.

131. Foothills shall consult with the government of the Province in respect of

- (a) the road network required for the pipeline; and
- (b) the nature, location and use of any
 - (i) storage area,

- (ii) camp site,
- (iii) staging area, or
- (iv) facility site.

132. Foothills shall, unless the designated officer otherwise directs, render any access road built by it, other than a road to be used by Foothills in the maintenance of the pipeline, impassable in a manner satisfactory to the designated officer.

133. Foothills shall reclaim for agricultural use any access road built by it on agricultural land other than a road to be used by Foothills in the maintenance of the pipeline where so requested by the landowner or tenant of the land.

Machinery, Transportation and Construction Equipment

134. Where Foothills operates machinery, transportation or construction equipment within any waterbody, such operation shall take place during such time and in such manner as is satisfactory to the designated officer in respect to that waterbody.

Inspection and Monitoring

135. (1) Foothills shall, in a manner satisfactory to the designated officer, inspect, evaluate and, when directed by the designated officer, monitor the pipeline and the environment affected by its construction and operation.

(2) When requested by the designated officer, Foothills shall, within a reasonable period of time, report the results of the inspection, evaluation and monitoring referred to in subsection (1) to the designated officer.

136. Where the designated officer is of the opinion that construction or operation of the pipeline has caused or is likely to cause a significant adverse environmental impact, Foothills shall take such measures as are satisfactory to the designated officer to mitigate or remedy the environmental impact and to prevent its recurrence.

Protection of Shelter Belts

137. (1) Foothills shall, where practicable, avoid the removal of any trees or shrubs from any shelter belt or wind break on any agricultural land.

(2) Where, in the construction of the pipeline, Foothills removes trees or shrubs from a shelter belt or wind break on any agricultural land, Foothills shall take such remedial measures as are satisfactory to the landowner or tenant of the land as soon as possible after the removal.

Forest and Prairie Fire Prevention and Suppression

138. Foothills shall develop such measures as are satisfactory to the designated officer for forest and prairie fire prevention and suppression.

139. Foothills shall, for the purpose of forest and prairie fire prevention and suppression, modify, when necessary, its construction procedures in a manner compatible with the forest and prairie fire hazard rating applicable to the area in which the construction of the pipeline is taking place.

140. Foothills shall be prepared to assist in any forest or prairie fire suppression in respect of a fire in an area through which the pipeline passes.

Environmental Plans and Procedures Manual

141. (1) Foothills shall prepare for the approval of the designated officer, and submit to him, at a time satisfactory to him, an Environmental Plans and Procedures Manual that sets out the measures and procedures Foothills proposes to take to

(a) comply with this Part;

(b) carry out any environmental requirements imposed by law;
and

(c) prevent, mitigate or remedy any adverse environmental impact that may result from the construction or operation of the pipeline.

(2) When the Environmental Plans and Procedures Manual referred to in subsection (1) is approved by the designated officer, Foothills shall thereupon carry out the measures and procedures set out therein.

Submissions

142. (1) Foothills shall submit to the designated officer, in accordance with a schedule approved by him,

(a) the environmental information used by it in preparing the manual referred to in subsection 141(1); and

(b) construction scheduling and engineering design information necessary for a review and evaluation of the manual.

(2) Foothills shall, when requested by the designated officer, submit to him any studies, reports, analyses or other material on which the information submitted pursuant to section 72 or subsection 77(1) was based.

(3) Where Foothills conducts studies or gathers data or information when considering the effect, if any, of the construction or operation of the pipeline on the existing or potential use of any land or waterbody through which the pipeline passes for the purpose of taking into account such effect pursuant to section 56, such studies, data or information shall be submitted by Foothills to the designated officer when requested by him.

143. When requested by the designated officer and in a manner satisfactory to him, Foothills shall submit to him any procedures or measures proposed by Foothills as alternatives to the procedures or measures referred to in subsection 141(1).

144. Where, subsequent to the approval by the designated officer of any procedure or measure referred to in subsection 141(1), Foothills obtains additional information of environmental significance relating to that procedure or measure, Foothills shall forthwith report such information to the designated officer.

INDEX

- Access roads, 130, 132, 133
- Aesthetic value of the landscape, 65(b)
- Agricultural Land, 91-96, 133, 137
 - definition, 2(1)
- Air Quality, 65-67
- Animals (See Wildlife)
- Application of terms and conditions, 3
- Arbitration, 48
- Archaeology, 86, 88, 89

- Big game animals, 74(a), 76(b)
 - definition, 2(1)
 - (See also Wildlife)
- Birds (See Wildlife)
- Blasting, 113-115
- Borrow pits, 109, 110, 111, 112
 - definition, 2(1)
- Buffer strips, 98(b), 111
- Burial grounds, 87
- Business Opportunities, 17(2)(g), 30, 32-34

- Camps, 35, 40(b)
- Canada
 - government of, 17(1)(a), 26, 38, 119(c), 121(h)
 - laws of, 4, 54, 86
- Certified status of seeds, 62
 - definition, 2(1)
- Clearing, 97-100
- Compensation for Damage to Property, 45-48
 - (See also Indemnification)
- Compressor stations, 65, 66, 67, 68
- Construction
 - definition, 2(1)
 - (See also Scheduling of construction)
- Construction machinery and equipment, 12, 134
 - aircraft, 40(b)
 - vehicles, 40(b), 134
- Consultation by Foothills, 21, 22, 23(b)
 - with government of Canada, 26, 38
 - with government of Province, 21(1), 25, 26, 28, 34, 38, 49, 50, 51, 72, 77(1), 85(1), 101(1), 131
 - other, 31, 39, 49, 50, 51, 95, 96

Contractors,5,8(c),22,45,46
 subcontractors,5,8(c),45,46
Cultural areas,49(1),50,51,85

Damage to property,45,46,47,48
Debris
 disposal of,99
Designated officer
 assistance to,6
 authorized representative of,128(1)
 definition,2(2)
Drainage,61,118

Emergency Measures,10-13
Employment (See Pipeline Labour)
Environmental impact,17(2)(e),53(b),91,97,136,141(c)
 definition,2(1)
Environmental Plans and Procedures Manual,141,143,144
Erosion,57,58,59,61,63,64,97

Facilities,70,79,130,131
 definition,2(1)
Farming,113(b)
Farm land (See Agricultural Land)
Fences and gates,95,96
Fire
 forest and prairie,138,139,140
Firearms,40
Fisheries,77-83,102(b),112,113(a),121(e),142(2)
Fishing,49,50,51,82,121(d)
Flora
 rare and endangered,71
Foothills
 application,3
 undertakings,14
Fossils,88(b)
Fuel,80,101(1),102,103,104
 definition,2(1)

Game hunting device,40
Granular materials,80,109(c)
Grazing,63(b)
Groundwater,55(2),81(1)

Hazardous material, 80, 101(1), 102, 104, 107
definition, 2(1)
Health
 of any person, 66(a)
 of employees, 36-37
Her Majesty
 indemnification against, 8, 9
Historic resources investigation program, 84
Hunting, 49, 50, 51, 113(b)
Hydrostatic testing, 121(2), 123, 124, 125, 126, 127, 128

Ice fog, 65(a), 66
Indemnification, 8-9
Indian, 17(1)(d)(e), 19, 21(1), 29, 30, 31, 49(1), 50, 51
 definition, 2(1)
Information in respect of the
 pipeline, 17, 18, 19, 20, 23(a)
Inspection
 definition, 2(1)
 environmental, 64(1), 75, 83, 94, 104(1), 108(a), 120, 135
 socio-economic, 41, 42, 43, 44
Inventory of traditional harvesting and cultural
 areas, 49(1), 50, 51

Labour organizations, 22, 25
Land use, 17(2)(d), 56, 59
 submission of information about, 142(3)
Liability (See Compensation for Damage to Property)
Livestock, 66(c), 69(c), 70(2), 113(a)

Manpower (See Pipeline Labour)
Manpower plan, 25
Metis, 17(1)(d)(e), 19, 21(1), 29, 30, 31
Migration of workers, 26
Monitoring
 definition, 2(1)
 environmental, 120, 135
 socio-economic, 41, 42, 43, 44
Monuments, 87
 geodetic, 90

Noise, 68-70
Non-status Indian, 17(1)(d), 19, 21(1), 29, 30, 31
Northern Pipeline Act (Act), 3, 25, 54(b)
Northern Pipeline Agency (Agency), 41, 42, 43(2)

- Operation
 - definition,2(1)
- Opportunities for residents,17(2)(c)
 - (See also Business Opportunities)
- Opportunity Measures,17(2)(f),29-31
- Orientation of Employees,27-28
- Overwintering areas,81(1)

- Palaeoecology,86,88,89
- Parks (See Special Interest Areas)
- Pipeline
 - access to,39(a),96
 - application,3
 - proposed location,17(2)(a),50,56,65,73,76(a),79(b),85
 - (See also Right-of-way of pipeline)
- Pipeline Labour,25-26
 - (See also Opportunity Measures)
- Plans,15
 - business opportunities,34
 - information,24
 - manpower,25
 - opportunity measures,31
 - orientation,28
 - traditional resource protection,52
 - (See also Environmental Plans and Procedures Manual)
- Plan Schedule
 - socio-economic,16
- Property damage,45,46,47,48
- Province
 - definition,2(1)
 - consultation with government of,25,26,28,34,38,49(1),50,51,72,77(1),85(1),101(1),131
 - laws of,4,54,86
- Provincial standards,54

- Quarries,109,110,111,112

- Rare and endangered species,71
 - (See also Wildlife)
- Reclamation,60,63,64
- Recreation site,86
 - definition,2(1)
- Recruitment (See Pipeline Labour)

- Remedial measures, 64(2), 70(2), 76, 94(b), 108(2), 136, 137(2)
- Resource use analysis of hunting, trapping and fishing areas, 49
- Revegetation, 61, 62, 63, 64, 93
- Right-of-way of pipeline
 - access to, 7
 - firearms on, 40(a)
- Roads, 98(b)(ii), 111, 129, 131
 - (See also Access roads)
- Route Alignment (See Pipeline)
- Royal Canadian Mounted Police, 38, 39
- Sandy terrain, 56
- Saskatchewan (See Province)
- Scheduling of construction, 17(2)(a), 51, 73, 76(a), 78, 79(a), 116
- Security, 38-40
- Sediment, 80
- Seeding, 62
- Shelter belts, 137
- Siltation, 80
- Special Interest Areas, 84-90
- Special interest groups, 17(1)(f), 19
- Studies of socio-economic impact, 43
- Submissions
 - engineering, 142(1)(b)
 - environmental, 62, 72, 77(1), 116, 117, 141, 142-144
 - socio-economic, 16, 24, 25, 28, 31, 34, 47, 49(1), 50, 51, 52
- Supply of goods and services, 17(2)(g), 30, 32, 33
- Surveillance
 - socio-economic, 41, 42, 43, 44
- Terms and conditions
 - application, 3
 - compliance with, 5, 41, 42, 44, 141(a)
 - environmental, 53-144
 - general, 4-13
 - socio-economic, 14-52
- Training
 - emergency procedures, 11
 - opportunity measures, 29
 - pipeline labour, 25
- Trapping, 49, 50, 51, 74(b), 113(b), 121(d)
- Undertakings, 14

Vegetation

clearing of, 97, 98, 99, 100
(See also Revegetation)

Visual resources, 100

definition, 2(1)

Waste Management, 105-108

definition of waste, 2(1)

Water Crossings, 83, 116-120

Water systems, 122(1)

Water withdrawal and discharge, 119, 121, 123, 124,
from overwintering areas, 81(1)

Wildlife, 69(b), 70(2), 72-76, 102(b), 112, 121(f), 142(2)

attraction to waste disposal sites, 106

blasting effects on, 113(a)

definition, 2(1)

rare and endangered, 71

Wind breaks, 137

Women, 29(b)(c)

women's organizations, 31

Work camps, 35, 40(b)