

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

The Northern Pipeline Agency

July, 1980

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(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 July 3, 1980 to the Certificate of Public Convenience and Necessity granted to Foothills Pipe Lines (Alta.) Ltd. for the construction and operation of the Alberta 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 (Alta.) Ltd. Foothills Pipe Lines (Alta.) 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 Alberta in regulating the construction and operation of gas pipelines in Alberta. Successful construction of many pipelines in the Province in past 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.

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

(ii)

(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 Alberta and officials of the Northern Pipeline Agency. Comments and advice were also received from Foothills Pipe Lines (Alta.) Ltd., other government agencies, and the public at large.

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 (ALTA.) LTD.
IN RESPECT OF THAT PORTION OF THE PIPELINE IN
THE PROVINCE OF ALBERTA

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 Alberta.

Interpretation

2. (1) In these terms and conditions,

"Act" means the Northern Pipeline Act;

"agricultural land" means any land that is used for any agricultural purpose and any land that is used for any crop or livestock enterprise;

"big game animals" means "big game" as defined in The Wildlife Act (Alberta);

"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 or 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 (Alta.) Ltd.;

"fuel" means all petroleum products used in the construction and operation of the pipeline;

"fur-bearing animals" means "fur-bearing animals" as defined in The Wildlife Act (Alberta);

"fur-bearing carnivores" means "fur-bearing carnivores" as defined in The Wildlife Act (Alberta);

"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 designs and specifications of the pipeline, and

(b) these terms and conditions are complied with;

"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 Alberta;

"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

(a) all big game animals, fur-bearing animals and fur-bearing carnivores native to the Province,

(b) migratory game birds as defined in the Migratory Birds Convention Act,

(c) all Galliformes native to the Province, and

(d) all species of the orders Falconiformes and Strigiformes.

(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.

Access to Right-of-Way of Pipeline

6. 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.

Assistance to Designated Officer

7. 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.

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. 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 such measures as are necessary to maintain equipment and supplies intended for 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 any community or organization referred to in subsection 21(1) during consultations required by that section and the undertaking is accepted by that 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, constitutes 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 on which 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; and
- (e) 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 26 and 27; and
- (g) 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 requirements 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, make available informed persons to assist in the dissemination of such information.

21. (1) Where Foothills receives a direction from the designated officer to consult with any community in the Province 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 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.

Orientation of Employees

25. Foothills shall, in consultation with the government of the Province and 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.

Opportunity Measures

26. Foothills shall

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

(b) ensure that women of the Province 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 of the Province to enable them to take maximum advantage of the opportunities referred to in paragraphs (a) and (b).

27. 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.

28. Foothills shall, following consultation with Indian, Metis and non-status Indian organizations in the Province and, when directed by the designated officer, any 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 26 and 27.

Security

29. 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.

30. 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; and
- (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.

31. 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

32. 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.

33. 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.

34. (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.

35. 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

36. 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.

37. 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.

38. Foothills shall submit to the designated officer, in a manner determined by him, information in respect of any unresolved matter referred to in paragraph 37(c).

39. 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, (Alberta); 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

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

41. 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 such 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 40.

42. 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 40.

43. 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 41 and 42.

PART II

ENVIRONMENTAL TERMS AND CONDITIONS

General

44. Foothills shall

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

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

45. Where, in this Part, Foothills is required to take measures and implement procedures in respect of the environment, Foothills shall

(a) incorporate in such measures and procedures those environmental practices 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

46. (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.

47. Where Foothills proposes a location of the pipeline or any 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 through which the pipeline is proposed to pass.

Prevention of Erosion and Drainage Disturbances

48. Foothills shall, in the planning and construction of the pipeline, take such measures as are satisfactory to the designated officer to

- (a) minimize disturbance on erosion-sensitive terrain, and
- (b) minimize construction on erosion-sensitive terrain during periods in which erosion is most likely to be initiated.

49. Foothills shall design and implement erosion control measures 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

50. Foothills shall implement such measures as are satisfactory to the designated officer to reclaim land, other than agricultural land, disturbed by the construction or operation of the pipeline.

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

52. Where land is to be reclaimed pursuant to section 50 or revegetated pursuant to section 51, Foothills shall give priority to the following objectives:

- (a) the control of erosion and its impact, and
- (b) the restoration of the aesthetic value of the land

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

53. (1) Where measures referred to in section 51 are taken that involve the seeding of land, Foothills shall use only seed mixes of certified status.

(2) Where a seed mix of certified status is not available in sufficient quantity for any revegetation referred to in section 51, Foothills shall take such measures as are satisfactory to the designated officer to encourage the invasion of plants native to the Province for such revegetation.

54. (1) Foothills shall, from time to time, inspect the erosion control measures referred to in section 49, the reclamation measures in section 50 and the revegetation measures referred to in section 51 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

55. 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 include in the submission the measures it proposes

(a) to control air pollution and to disperse 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.

56. 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; or

(b) transportation.

57. (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 such times as are 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

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

59. 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; and

(b) wildlife, referred in paragraph 62(a), in the areas of land and waterbodies during the periods of time described in the information referred to in section 62 in respect of such wildlife.

60. (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 or wildlife referred to in section 59, Foothills shall take such remedial measures to lower that noise level as are satisfactory to the designated officer.

Wildlife

61. Foothills shall take such measures as are satisfactory to the designated officer to minimize any adverse impact resulting from the construction or operation of the pipeline on any indigenous species of birds, mammals, reptiles or amphibians that occupy areas or exist in numbers so small that, in the opinion of the designated officer, their existence would likely be threatened by the construction or operation of the pipeline.

62. Foothills shall, when requested by the designated officer and following consultation with the government of the Province, submit to him information satisfactory to the designated officer 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.

63. 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 areas and during any periods of time in respect of those areas described in the information referred to in section 62 is minimized.

64. 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.

65. (1) Foothills shall, from time to time during construction of the pipeline, inspect those areas described in the information referred to in section 62 in which the continued existence of significant wildlife populations may be threatened.

(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.

Fisheries

66. (1) Foothills shall, when requested by the designated officer and following consultation with the government of the Province, submit to him information satisfactory to the designated officer 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 spawning grounds, significant overwintering areas and migration routes 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.

67. 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 any 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 66(1) is minimized.

68. 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.

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

70. (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 66(1) withdraw water from overwintering areas or from groundwater directly replenishing those areas.

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

71. 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 or sport fishing.

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

Special Interest Areas

73. 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.

74. (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 is in 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 the natural and cultural values of that area.

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

76. 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.

77. Foothills shall establish and conduct an archaeological program satisfactory to the designated officer to

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

(b) analyze the archaeological and associated palaeoecological materials

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

78. Foothills shall provide, when requested by the designated officer, evidence satisfactory to the designated officer that any archaeological specimens and related materials, field notes, plans and maps, photographs, analyses and other relevant documents collected during the archaeological program referred to in section 77 are deposited with the government of the Province or are retained at a place and under such arrangements as are approved by that government.

79. (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

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

(a) unless otherwise directed by the designated officer, 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 fertility; and

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

(2) Foothills shall consult with the Department of Agriculture of the government of the Province on the grade and freedom from weed seed of the seed to be used in revegetating any agricultural land disturbed by the construction of the pipeline.

81. Where Foothills has stabilized the surface of agricultural land and returned it as far as practicable to its previous level of fertility pursuant to subsection 80(1) 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.

82. Foothills shall, unless otherwise directed by the designated officer, salvage topsoil on any agricultural land that it has disturbed during the construction of the pipeline.

Clearing

83. 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.

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

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

(b) cut, deck and arrange utilization of merchantable coniferous timber cleared by Foothills in such manner as is satisfactory to the designated officer;

(c) where 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

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

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

86. 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

87. 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 62, any fish habitat described in the information referred to in subsection 66(1) or any important fish harvesting area; 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.

88. (1) Where Foothills uses a fuel storage area containing any above-ground tank exceeding 52 m³ in capacity, Foothills shall surround that area by reinforced concrete or an earth dyke lined with plastic or other impervious material.

(2) Foothills shall submit to the designated officer for approval the design of a dyke referred to in subsection (1) and of the area that it surrounds.

89. (1) Foothills shall inspect in such manner as is satisfactory to the designated officer facilities to handle and store fuel and other hazardous material to detect 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 prevent further loss.

Waste Management

90. (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 required 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.

91. Foothills shall establish procedures satisfactory to the designated officer to prevent access by fur-bearing carnivores or bears to waste disposal sites, incinerator sites or other waste storage or treatment sites and to minimize the attractiveness of such sites to such carnivores or bears.

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

93. (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

94. 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 a borrow pit or quarry.

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

96. Foothills shall not extract granular materials from the bed of a waterbody unless that part of the bed of the waterbody from which such materials are to be extracted is dry.

97. Foothills shall leave a buffer strip that is at least 100 m wide of undisturbed vegetation between a borrow pit or quarry that it opens and any adjacent road.

98. 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 fish and fish habitat in that waterbody, swamp, marsh, bog or fen, as the case may be.

Blasting

99. Foothills shall establish blasting procedures satisfactory to the designated officer to minimize

(a) any adverse effects on bird, fish or mammal populations; and

(b) any interference with fishing, hunting or trapping

in the area through which the pipeline passes.

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

Water Crossings

101. 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.

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

Water Withdrawal, Water Discharge and Hydrostatic
Testing

103. Foothills shall, prior to withdrawing significant quantities of water from or discharging significant quantities of water into any waterbody or groundwater system, ensure to the satisfaction of the designated officer that such 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; and
- (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.

104. (1) Foothills shall, when designing or operating a camp water system, compressor station water system, granular materials 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.

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

106. 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.

107. Foothills shall establish procedures satisfactory to the designated officer

(a) to avoid spilling any test fluid used by Foothills 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.

108. Foothills shall prevent water used by it for hydrostatic testing from being transferred from the Peace-Athabasca, Saskatchewan or Columbia watershed to any other watershed.

109. (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

110. (1) Subject to subsection (2), Foothills shall,

(a) when designing any access road or facility for use in any locality or region in the area through which the pipeline passes, or

(b) during the construction or operation of any access road or facility in any locality or region in that area,

take into account, in a manner satisfactory to the designated officer, the local and regional environment.

(2) Subsection (1) does not apply to an access road or facility on the pipeline right-of-way.

111. 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.

112. 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.

Machinery, Transportation and Construction Equipment

113. 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 of that waterbody.

Inspection and Monitoring

114. (1) Foothills shall, in a manner satisfactory to the designated officer, inspect the pipeline and the land and water disturbed by the pipeline, evaluate the results of the inspection and, when directed by the designated officer, monitor the environmental impact of the pipeline.

(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.

115. Where the designated officer is of the opinion that the 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

116. (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 Fire Prevention and Suppression

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

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

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

Environmental Plans and Procedures Manual

120. (1) Foothills shall prepare and submit to the designated officer an Environmental Plans and Procedures Manual, constituted in Parts, that sets out the procedures or measures Foothills intends 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) Each Part of the Environmental Plans and Procedures Manual referred to in subsection (1) shall be submitted to the designated officer for his approval.

(3) Where the designated officer approves a procedure or measure set out in a Part submitted by Foothills pursuant to subsection (2), Foothills shall thereupon carry out such procedure or measure.

Submissions

121. (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 Parts referred to in subsection 120(1), and

(b) construction scheduling and engineering design information necessary for a review and evaluation of the Parts referred to in subsection 120(1).

(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 62 or subsection 66(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 47, such studies, data or information shall be submitted by Foothills to the designated officer when requested by him.

122. 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 120(1).

123. Where, subsequent to the approval by the designated officer of any procedure or measure referred to in subsection 120(1), Foothills obtains additional information of environmental significance relating to that procedure or measure, Foothills shall forthwith report such information to the designated officer.

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