



RIGHT-OF-WAY GRANT
for the
TRANS-ALASKA GAS SYSTEM
from
THE UNITED STATES OF AMERICA
to
THE YUKON PACIFIC CORPORATION

Table of Contents

<u>Section</u>	<u>Page</u>
1 Grant of Right-of-Way . . . . .	.1
2 Purpose of Grant; Limitation of Use to Holder . . . . .	.2
3 Transportation of Gas . . . . .	.2
4 Exhibits; Incorporation of Certain Documents by Reference . . . . .	.3
5 Width of Right-of-Way . . . . .	.3
6 Location of Right-of-Way . . . . .	.4
7 Duration of Right-of-Way Grant . . . . .	.5
8 Rental Fee for Right-of-Way . . . . .	.6
9 Quality Assurance and Control . . . . .	.6
10 Compliance with Notices to Proceed . . . . .	.8
11 Reservation of Certain Rights to the United States . . . . .	.8
12 Reimbursement of Department of the Interior's Expenses . . . . .	.9
13 Liability	10
14 Indemnification of the United States	11
15 Bonding	12
16 Insurance	13
17 Laws and Regulations	13
18 No Right of Set Off	14
19 Right of United States to Perform	14
20 Liens	14
21 Duty of Holder to Abate	15
22 Temporary Suspension Orders of Authorized Officer	15
23 Appeal Procedures	16
24 Civil Rights	16
25 Native and Other Subsistence	16
26 Termination or Suspension of Right-of-Way	16
27 Release of Right-of-Way	17
28 Access to Documents	18
29 Rights of Third Parties	19
30 Covenants Independent	19
31 Partial Invalidity	19
32 Waiver Not Continuing	19
33 Remedies Cumulative; Equitable Relief	19
34 Section Heading	19
35 Authority to Enter Grant	20
36 Acceptance of Grant	20
Exhibit A. Alignment Maps and Site Location Drawings Identifying the General Route of the Pipeline	
Exhibit B. Stipulations for the Grant of Right-of-Way for the Trans-Alaska Gas System	
Exhibit C. Requirements of the Department of Defense Relating to Military Installations	
Exhibit D. Requirements of the National Oceanic and Atmospheric Administration	

GRANT OF RIGHT-OF-WAY FOR THE
TRANS-ALASKA GAS SYSTEM

1. RIGHT-OF-WAY GRANT* (Serial Numbers F-83941 and AA-53559)

A. Pursuant to Section 28 of the Mineral Leasing Act of 1920, as amended (30 U.S.C. 185), and the regulations of the Department of the Interior in Title 43, Code of Federal Regulations, Part 2880, the United States of America (hereinafter referred to as the United States) does hereby grant to the Yukon-Pacific Corporation (hereinafter referred to as HOLDER), a corporation formed under the laws of the State of Alaska, whose mailing address is:

Yukon Pacific Corporation
P.O. Box 10-1700
Anchorage, Alaska 99510

A RIGHT-OF-WAY across certain FEDERAL LANDS for the construction, OPERATION and termination of one natural GAS PIPELINE and RELATED FACILITIES, as such lands are identified by HOLDER'S alignment maps and site location drawings, Series TAGS-01, consisting of 31 sheets dated May 1, 1988, attached hereto as Exhibit A. The effective date of this grant is October 17, 1988.

B. Excluded from this GRANT are: lands which are the subject of valid applications for allotments made pursuant to the Act of May 17, 1906, as amended, (34 Stat 197), which were pending before the Department of the Interior on or before December 18, 1971, and which were not knowingly and voluntarily relinquished by the applicant thereafter.

C. There is hereby reserved to the United States all rights reserved, or directed to be reserved, to the United States under any applicable law or regulation of the United States or elsewhere under this GRANT.

D. The GRANT hereby made is subject to:

- (1) the provisions of this GRANT;
- (2) all applicable laws and regulations of the United States; and
- (3) any valid existing rights in the lands subject to the RIGHT-OF-WAY, including without limitation the valid pre-existing rights, if any, of the State of Alaska and the holders of the Grants of Rights-of-Way for the TRANS-ALASKA PIPELINE SYSTEM and the ALASKA NATURAL GAS TRANSPORTATION SYSTEM

* Terms having special meaning in the body of this RIGHT-OF-WAY GRANT or in the STIPULATIONS (Exhibit B hereof) are capitalized.

2. Purpose of GRANT; Limitation of Use to HOLDER

A. The RIGHT-OF-WAY is granted for the purpose of the construction, OPERATION and termination of one (1) GAS transportation PIPELINE, consisting of one (1) line of thirty-six (36) inch diameter pipe and its RELATED FACILITIES.

B. HOLDER, its agents, contractors, and subcontractors (at any tier) shall not use the RIGHT-OF-WAY or the land subject thereto for any other purpose and shall not locate or construct any other pipelines (including looping lines) or other improvements within the RIGHT-OF-WAY without the prior written approval of the AUTHORIZED OFFICER.

C. The PIPELINE and RELATED FACILITIES shall be used for only the transportation of GAS, and it shall not be used for any other purpose without the prior written approval of the AUTHORIZED OFFICER.

D. HOLDER shall not allow or suffer any other PERSON or BUSINESS ENTITY to use the RIGHT-OF-WAY for the purpose set forth in Section 2.A. above.

E. Nothing in Section 2.D. above is intended to:

- (1) excuse or preclude HOLDER from complying with its obligations under Section 3 of this GRANT, or
- (2) preclude HOLDER from employing agents, contractors, or subcontractors (at any tier) to effect construction, OPERATION or termination of the PIPELINE SYSTEM.

F. Prior to beginning construction of the PIPELINE SYSTEM, HOLDER shall obtain necessary authorizations and Presidential findings as may be required by the Alaska Natural Gas Transportation Act, 15 USC 719j., the Natural Gas Act, 15 USC 717 et seq., the Energy Policy and Conservation Act, 42 USC 6212, relative to the exportation of North Slope Alaskan Gas, and such reasonable assurances by the HOLDER that the Anderson Bay LNG Facility will meet appropriate Federal and State design, location, and construction standards.

3. Transportation of GAS

HOLDER shall, in accordance with the provisions of Section 28 of the Mineral Leasing Act of 1920, as amended:

A. Construct, operate, and maintain the PIPELINE as a common carrier;

B. Accept, convey, transport, or purchase, without discrimination, GAS delivered to the PIPELINE without regard to whether such GAS was produced on Federal or non-Federal lands; and

C. Accept, convey, transport, or purchase, without discrimination, GAS produced from Federal lands or from the resources thereon in the vicinity of the PIPELINE in such proportionate amounts as the AUTHORIZED OFFICER may, after a full hearing with due notice thereof to HOLDER and a proper finding of facts, determine to be reasonable.

4. Exhibits; Incorporation of Certain Documents by Reference

A. The Exhibits attached and listed below in this subsection are, by this reference, incorporated into and made a part of this GRANT as fully and effectually as if the Exhibits were set forth herein in their entirety:

- (1) List of applications and accompanying alignment maps and site location drawings identifying the general route of the PIPELINE and its RELATED FACILITIES, attached hereto as Exhibit A.
- (2) STIPULATIONS for the GRANT of RIGHT-OF-WAY for the Trans-Alaska Gas System, being numbered 1. through 3.9.2., inclusive, attached hereto as Exhibit B, which are sometimes referred to in this GRANT as the "STIPULATIONS."
- (3) Requirements of the Department of Defense relating to military installations, attached hereto as Exhibit C.
- (4) Requirements of the National Oceanic and Atmospheric Administration relating to that agency's installation, attached hereto as Exhibit D.

B. ~~The terms, conditions and STIPULATIONS contained herein are hereby incorporated, where applicable, in all other use authorizations issued in support of field activities relative to and including the construction, OPERATION and termination of the PIPELINE SYSTEM requiring use of FEDERAL LANDS.~~

5. Width of RIGHT-OF-WAY

The width of the RIGHT-OF-WAY, in terms of surface measurement, is fifty (50) feet plus the ground occupied by the PIPELINE; provided, however, that up to and including the date on which HOLDER may file an application for modification of the RIGHT-OF-WAY boundaries in accordance with Section 6. D. hereof, HOLDER may apply for, and the AUTHORIZED OFFICER may direct or

authorize, increases in the width of the RIGHT-OF-WAY at specified points if, it is found and the reasons for such findings are recorded, that in the judgment of the AUTHORIZED OFFICER, a wider RIGHT-OF-WAY is necessary for OPERATION of the PIPELINE after construction, or is necessary to protect the environment or provide for public health and safety.

6. Location of RIGHT-OF-WAY

A. The siting of the PIPELINE and its RELATED FACILITIES shall be determined in accordance with the provisions of STIPULATIONS 1.9.

B. After completion of construction of the PIPELINE, the FEDERAL LANDS subject to the RIGHT-OF-WAY shall be the land occupied by the PIPELINE and, in terms of surface measurement, twenty-five (25) feet on each side of the PIPELINE measured from its outermost extremities. With respect to RELATED FACILITIES, the width shall be twenty-five (25) feet around the perimeter of the RELATED FACILITY.

C. Upon completion of construction of the PIPELINE and its RELATED FACILITIES within a MAPPING SEGMENT, as well as upon the issuance of any authorization or directive that the AUTHORIZED OFFICER may issue in accordance with the provisions of Section 5 hereof, HOLDER shall, if directed by the AUTHORIZED OFFICER, physically mark on the ground the proposed boundaries of the RIGHT-OF-WAY at such locations and in such manner as is acceptable to the AUTHORIZED OFFICER.

D. At any time prior to the sixtieth (60th) day preceding the filing of the maps of survey as provided in Section 6. E. hereof, HOLDER may file an application for modification of the RIGHT-OF-WAY boundaries provided that, after modification, the RIGHT-OF-WAY will include the ground occupied by the PIPELINE plus fifty (50) feet adjacent thereto and such additional land as authorized by the AUTHORIZED OFFICER pursuant to Section 5 hereof. Upon approval of such application for modification of boundaries and acceptance of the documents and maps required by Section 6. E. hereof, ~~the RIGHT-OF-WAY shall be as delineated on~~ said maps of survey.

E. Within three hundred and sixty (360) days after the first date of acceptance of GAS for shipment in the PIPELINE (and, in the case of any addition, deletion or alteration of the PIPELINE or a RELATED FACILITY following the date of first acceptance of GAS for shipment, within one hundred and eighty (180) days after the addition, deletion or alteration has, in the judgment of the AUTHORIZED OFFICER, been fully completed), HOLDER shall survey and provide adequate monumentation to locate and describe the RIGHT-OF-WAY and shall file:

- (1) proof of construction of the PIPELINE and its RELATED FACILITIES in accordance with the applicable regulations of the DEPARTMENT;
- (2) such documents of relinquishment of land not included in the modified RIGHT-OF-WAY, if any, as may be required by the AUTHORIZED OFFICER;
- (3) appropriate references to applications in which requests were made for RIGHT-OF-WAY widths greater than the normal limitations specified in Section 5 of this GRANT, and applications for modification of the RIGHT-OF-WAY boundaries as provided in Section 6. D, hereof; and
- (4) a map, or maps of survey, prepared in such manner as shall be required by the AUTHORIZED OFFICER, showing: the final "as-built" location of the completed PIPELINE and its RELATED FACILITIES, including the final locations of all buried and above ground improvements; the centerline of the PIPELINE, as definitely located, and, referenced to the PIPELINE centerline, the boundaries of the RIGHT-OF-WAY, as definitely located.

Each portion of the PIPELINE and its RELATED FACILITIES as depicted on the said survey map or maps, and for which a NOTICE TO PROCEED, or an authorization, issued in accordance with Stipulation 1.10.5. altering either the route or the initially approved location along the route of the RIGHT-OF-WAY, has been issued, shall be referenced to the relevant NOTICE TO PROCEED or other authorization.

7. Duration of RIGHT-OF-WAY GRANT

A. The GRANT hereby made of the RIGHT-OF-WAY shall come to an end and expire on the 17th October 2018, at noon, Anchorage, Alaska time, unless prior thereto it is relinquished, abandoned, or otherwise terminated pursuant to the provisions of this GRANT ~~or of any applicable Federal law or regulation.~~

B. Upon expiration of the initial or any subsequent RIGHT-OF-WAY GRANT, or its earlier relinquishment, abandonment, or other termination, the provisions of this GRANT, to the extent applicable, shall continue in effect and shall be binding on the parties hereto, their successors or assigns, until they have fully performed their respective obligations and liabilities accruing before or on account of the expiration, or the prior termination, of the GRANT.

C. The RIGHT-OF-WAY shall be renewed, subject to and in accordance with the provisions of Section 28 of the Mineral Leasing Act of 1920, as amended and applicable regulations.

D. Any subsequent conveyance, transfer or other disposition of any right, title or interest in the FEDERAL LANDS or any part thereto, burdened by and subservient to the RIGHT-OF-WAY, shall, to the extent allowed by law, be subject to the RIGHT-OF-WAY and the provisions of this GRANT, including HOLDER'S right to renew the RIGHT-OF-WAY under Section 7. C.

8. Rental Fee for RIGHT-OF-WAY

A. HOLDER shall pay to the United States, annually and in advance, the fair market rental value of the RIGHT-OF-WAY, as determined by the AUTHORIZED OFFICER. (Such rental value is hereinafter called the "rental fee.")

B. The initial rental fee shall be Thirty Thousand Seven Hundred Fifty and no/100 dollars (\$30,750.00) for each calendar year. The first annual rental fee shall be prorated to cover the portion of the calendar year 1988 which remains after the effective date hereof and shall be due and payable by not later than the effective date hereof. The rental fee for the first full calendar year commencing after the effective date hereof and for each subsequent calendar year shall be due and payable by not later than the last full business day immediately preceding the first day of January of the calendar year for which the rental fee is payable. The rental fee for each calendar year shall be billed to HOLDER at least thirty (30) days in advance of the due date thereof. All such payments shall be delivered to the AUTHORIZED OFFICER and shall be accepted subject to collection.

C. The rental fee for each succeeding calendar year shall be subject to adjustment from time to time in accordance with the regulations of the DEPARTMENT. The AUTHORIZED OFFICER also may adjust retroactively the amount of the annual rental fee for any calendar year that is based on an appraisal which is made before the RIGHT-OF-WAY is, in its entirety, finally located, surveyed and monumented; ~~any sum determined by the AUTHORIZED OFFICER to be payable (by either the United States or HOLDER) in connection with an adjustment, as provided for in this sentence, shall be due and payable within thirty (30) days after notice is given of the amount due.~~

9. Quality Assurance and Control

A. The quality assurance and quality control programs shall be comprehensive and designed to assure that the applicable requirements of 49 CFR Part 192 and environmental and technical STIPULATIONS will be incorporated in the FINAL DESIGN and complied with throughout all phases of construction, OPERATION

and termination of the PIPELINE SYSTEM. The HOLDER shall provide for continuous inspection of PIPELINE construction to ensure compliance with the approved design specifications and these STIPULATIONS. The term "continuous inspection" as used in this STIPULATION means that at least one inspector is observing each PIPELINE construction operation where PIPELINE integrity is involved (e.g., the pipe gang, backend welders, weld non-destructive testing, coating and wrapping, bedding, lowering-in, padding and backfill) at all times while that construction is being performed or where PIPELINE construction operations are proximate to the TRANS-ALASKA PIPELINE SYSTEM or the ALASKA NATURAL GAS TRANSPORTATION SYSTEM.

B. At a minimum, the following shall be included in the quality assurance program:

- (1) Procedures for the detection and prompt abatement of any actual or potential procedure, activity, event or condition, of an adverse nature, that:
 - (a) Is susceptible to abatement by the HOLDER;
 - (b) Could reasonably be expected to arise out of, or affect adversely, design, construction, OPERATION or termination of all or any part of the PIPELINE SYSTEM; and
 - (c) That at any time may cause or threaten to cause:
 - (i) A hazard to the safety of workers or to public health or safety, including but not limited to personal injury or loss of life of any person;
 - (ii) SIGNIFICANT DAMAGE to the environment, including but not limited to areas of vegetation or timber, fish or other wildlife populations or their habitats, subsistence use, or any other natural resource; or
 - ~~(iii) Serious and irreparable harm or damage to existing private improvements on or in the general vicinity of the right-of-way area;~~
- (2) Procedures for the relocation, repair or replacement of improved or tangible property and the rehabilitation of natural resources (including but not limited to REVEGETATION, restocking fish or other wildlife populations, and reestablishing their habitats) seriously damaged or destroyed if the immediate cause of the damage or destruction results from construction, OPERATION or termination of all or any part of the PIPELINE SYSTEM;

- (3) Methods and procedures for achieving component and subsystems quality through proper design and specification;
- (4) Methods for applying quality assurance and quality control criteria in the selection of the HOLDER'S contractors and subcontractors, and contract purchases of materials and services;
- (5) A plan for collecting, recording, storing, retrieving and reviewing data to assure that quality has been attained, including procedures for initiating and maintaining adequate records of inspections, identification of deviations and completion of corrective actions;
- (6) Specific methods of detecting deviations from designs, plans, regulations, specifications, stipulations and permits (including establishing effective procedures for timely evaluation and correction of field non-conformance problems) as the basis for initiating corrective action to preclude or rectify the hazards, harm or damage referenced in Sections 9 B. (1) and 9 B. (2) of these STIPULATIONS;
- (7) Inspection, testing and acceptance of components, sub-systems and subassemblies; and
- (8) A plan for conducting surveys and field inspections of all facilities, processes and procedures of the HOLDER, its contractors, subcontractors, vendors and suppliers critical to the achievement of quality.

C. The HOLDER (including its agents, employees, contractors and subcontractors and the employees of each of them) shall comply with the quality assurance and control program as approved and HOLDER shall submit reports to the AUTHORIZED OFFICER to demonstrate such compliance. Such reports shall be submitted quarterly unless otherwise requested by the AUTHORIZED OFFICER.

10. Compliance with NOTICES TO PROCEED

All construction of the PIPELINE SYSTEM undertaken by HOLDER shall comply in all respects with the provisions of applicable NOTICES TO PROCEED issued by the AUTHORIZED OFFICER.

11. Reservation of Certain Rights to the United States

A. The United States reserves and shall have a continuing and reasonable right of access to any part of the lands (including the subsurface of, and the air space above, such lands) that are

subject to the RIGHT-OF-WAY, and a continuing and reasonable right of physical entry to any part of the PIPELINE SYSTEM for inspection or monitoring purposes and for any other purpose or reason that is reasonably consistent with any right or obligation of the United States under any law or regulation, this GRANT, or any other grant, permit or authorization relating in whole or in part to all or any part of the PIPELINE SYSTEM.

B. The rights of access and entry reserved in Section 11. A. shall extend to and be enjoyed by any contractor of the United States, any subcontractors (at any tier) of the contractor and their respective agents and employees, as well as such other PERSONS, as may be designated from time-to-time in writing by the AUTHORIZED OFFICER.

C. There is reserved to the United States the right to grant rights-of-way, permits, easements or other authorizations to third parties for compatible uses on, or adjacent to, the lands subject to the RIGHT-OF-WAY. Before the United States grants an additional authorization for a compatible use, the United States will notify HOLDER of its intentions and shall consult with HOLDER before taking final action in that regard.

12. Reimbursement of Department of the Interior Expenses

A. HOLDER shall reimburse the United States for administrative and other costs incurred directly or indirectly for:

- (1) processing applications filed by HOLDER in connection with the PIPELINE SYSTEM; and
- (2) monitoring the construction, OPERATION and termination of all or any part of the PIPELINE SYSTEM, all in accordance with the Mineral Leasing Act of 1920, as amended, 30 U.S.C. 185(1), and applicable regulations.

B. If the HOLDER disputes any item of a statement that shall be rendered for prepayment of estimated expenses, or for payment of actual expenses incurred, as to either the need for or cost of the work done, it shall promptly notify the AUTHORIZED OFFICER. The AUTHORIZED OFFICER shall meet with the HOLDER promptly in an effort to resolve the dispute. If the dispute remains unresolved, the HOLDER shall make payment and may do so under protest, subject to appeal after audit.

C. Whether or not, pursuant to Section 12. B. as above, the HOLDER disputes an item or pays an amount under protest, the HOLDER shall have the right to conduct, at its own expense, reasonable audits by auditors or accountants designated by the HOLDER, of the books, records, and documents of the United States including its independent consultants and/or contractors relating to the items on any particular statement that shall be submitted,

at the places where such books, records, and documents are usually maintained, and at reasonable times; provided, however, that written notice of a desire to conduct such an audit must be given the AUTHORIZED OFFICER by not later than the seventy-fifth (75th) day after receipt by the HOLDER of a report of actual expenses incurred during the quarter; and provided further, that any such audits shall be completed within ninety (90) days after filing of said notice. After completion of an audit, the AUTHORIZED OFFICER shall meet with the HOLDER with respect to any items still in dispute and shall thereafter rule on the matter and make appropriate adjustments of the HOLDER account. To the extent the dispute is not resolved, the HOLDER may appeal to the SECRETARY pursuant to the procedures set forth in 43 CFR, Part 4.

13. Liability

HOLDER shall be liable for damage or injury to the United States to the extent provided by Section 28(x) of the Mineral Leasing Act of 1920, as amended 30 USC 185(x), and 43 CFR 2883.1-4 as such regulations exist or as they may be promulgated in the future. HOLDER shall be held to a standard of strict liability for damage or injury to the United States resulting from any of the following, occurring in the RIGHT-OF-WAY area, in connection with the construction, OPERATION or termination of the PIPELINE SYSTEM:

A. Fire or explosion caused by any of the following activities: operation of motorized or electrical equipment, welding, smoking, open burning, transportation of GAS through the PIPELINE, and transportation, storage or use of flammable or explosive substances;

B. Degradation of permafrost, erosion of soil and/or undermining or weakening of soil which supports structures or facilities caused by any of the following activities: operation of vehicles or mobile equipment, excavation or placement of gravel, clearing, grubbing or earth moving, maintenance of the PIPELINE in the dormant condition, and construction or maintenance of buildings or other RELATED FACILITIES;

C. Spillage of OIL caused by any of the following activities: transportation or use of petroleum products, and any activity which directly or indirectly causes a puncture or break in the TRANS-ALASKA PIPELINE SYSTEM;

D. Leakage of GAS, fire or explosion caused by any activity which directly or indirectly causes a puncture or break in the ALASKA NATURAL GAS TRANSPORTATION SYSTEM.

However, this section shall not apply to damage or injury resulting primarily from an act of war or negligence of the United States. The maximum limitation shall not exceed one

million dollars (\$1,000,000.00) for any one event and any liability in excess of such amount shall be determined by the ordinary rules of negligence of the jurisdiction in which the damage occurred.

14. Indemnification of the United States

A. HOLDER shall indemnify and hold harmless the United States, its agents and employees, against and from any and all liabilities or damages of any nature whatsoever which the United States, its agents, employees, contractors or subcontractors (at any tier) become legally obligated to pay, and which arise out of, or are connected with, any one or more of the following:

- (1) the construction, OPERATION or termination of the PIPELINE SYSTEM;
- (2) the approval (as distinguished from the ordering of a modification pursuant to STIPULATION 1.3.3.) by the United States, its agents, employees, contractors or subcontractors (at any tier), of any design, plan, CONSTRUCTION MODE, construction or research pertaining to the PIPELINE SYSTEM or any part thereof; or
- (3) the physical entry by any PERSON upon, or the use or occupancy by any PERSON of, any FEDERAL LAND that is the subject of any use or right which is granted or afforded to HOLDER, or to their respective agents, employees, contractors or subcontractors (at any tier) in connection with the PIPELINE SYSTEM; provided, however, that the provisions of items (1) and (3) of this Section shall not be deemed to apply to liabilities or damages that are caused:
 - (a) by an act of war; or
 - (b) solely by
 - (i) the negligence of the United States, and/or
 - (ii) the negligence or willful misconduct of an agent, employee, contractor or subcontractor (at any tier) of the United States not acting within the scope of his authority or employment, and/or

(iii) the negligence or willful misconduct of PERSONS who are authorized to enter upon, use or occupy the damaged property or areas pursuant to any Federal lease, permit, or other written authorization that is issued for any use or purpose other than in connection with the construction, OPERATION or termination of the PIPELINE SYSTEM.

B. HOLDER shall be notified in writing of any claim for which indemnity under the provisions of this section is sought, and such claim shall not be compromised without the written consent of HOLDER, which consent HOLDER agrees shall not be unreasonably withheld or delayed.

15. Bonding

A. The HOLDER shall furnish the United States a surety bond or other security of such type and on such terms and conditions as are acceptable to the AUTHORIZED OFFICER in the principal amount of one million dollars (\$1,000,000.00). Said bond or other security shall be maintained in force and effect in the full principal amount, or in such reduced amount as may be approved by the AUTHORIZED OFFICER, at all times during the term of this GRANT and until released in writing by the AUTHORIZED OFFICER. Such release will not be unreasonably withheld upon the expiration of the term of this GRANT, including any renewals of this GRANT, and completion of the HOLDER'S obligations under this GRANT and applicable regulations.

B. Said bond or other security shall be security for payment of any sums owing to the United States pursuant to the provisions of Sections 13 and 19 of this GRANT.

C. These requirements are in addition to all other requirements of law, and are not intended to affect, nor are they intended to limit in any way, the HOLDER'S liability under any provision of law.

D. Prior to the issuance of the first NOTICE TO PROCEED for PIPELINE construction, the HOLDER shall furnish additional security in the amount of four million dollars (\$4,000,000.00) of such type and on such terms and conditions as are acceptable to the AUTHORIZED OFFICER. The requirement for such additional security shall be released in writing by the AUTHORIZED OFFICER after completion of construction and commencement of initial OPERATION of the PIPELINE. Such release will not be unreasonably withheld.

E. The AUTHORIZED OFFICER reserves the right to require additional security from the HOLDER if at any time the AUTHORIZED OFFICER determines it necessary in connection with construction, OPERATION or termination of the PIPELINE SYSTEM.

16. Insurance

The HOLDER hereby agrees to provide and maintain in force throughout the term of this GRANT appropriate liability insurance, including but not necessarily limited to policies for comprehensive general liability, automobile liability, and owned and non-owned aircraft liability. Coverage shall, to the reasonable satisfaction of the AUTHORIZED OFFICER, insure HOLDER'S liabilities for accidental occurrences imposed on it by operation of the requirement for indemnification of the United States contained in this GRANT. The United States shall be added to the above-described policies as an additional insured with respect to such liabilities. Provided, however, the AUTHORIZED OFFICER is authorized to review the amount of insurance required for this purpose at least every five years and to increase or decrease the amount required to reflect changed economic factors and conditions. Initially, coverage shall be in the minimum amount of \$5 million per occurrence. When use authorizations are issued for use and occupancy of any FEDERAL LANDS relative to PRE-CONSTRUCTION activities for the pipeline system, coverage shall be in the minimum amount of \$150 million per occurrence. Subsequent to approval by the AUTHORIZED OFFICER of the DESIGN CRITERIA and FINAL DESIGN for PIPELINE SYSTEM construction, and when HOLDER commences field activities pursuant to the first NOTICE TO PROCEED for such construction, such insurance shall be in the minimum amount of \$250 million per occurrence. When the PIPELINE SYSTEM has been placed into operation and provided that the HOLDER can demonstrate to the AUTHORIZED OFFICER net worth of \$500 million as evidenced by appropriate financial statements of HOLDER in its latest annual report to stockholders, such coverage shall then be required solely for the purpose of insuring the HOLDER'S aforesated obligations to the United States, and the minimum amount shall be \$50 million per occurrence.

17. Laws and Regulations

HOLDER shall comply with all applicable Federal and State laws and regulations, existing or hereafter enacted or promulgated. If at any time a conflict should exist between the terms, conditions and stipulations of this GRANT and applicable regulations, the applicable regulations shall prevail.

18. No Right of Set Off

With respect to any sum now or hereafter owing, or claimed to be owing, to the United States and that arises out of or is connected in any way with the construction, OPERATION or termination of all or any part of the PIPELINE SYSTEM, HOLDER shall not set off against, or otherwise deduct from, any such sum:

A. Any claim or judgment for money of the HOLDER against the United States not arising out of the construction, OPERATION or termination of all or any part of the PIPELINE SYSTEM;

B. Any claim or judgment for money of the HOLDER against the United States that arises out of the construction, OPERATION or termination of all or any part of the PIPELINE SYSTEM, if the sum now or hereafter owing, or claimed to be owing, to the United States is or shall be for any sum or charge required to be paid to the United States pursuant to Section 8, Section 12 or Section 19 hereof; or

C. Any claim or judgment for money of the HOLDER against the United States that arises out of, or pursuant to, any statute administered by any department or agency of the United States other than the Department of the Interior.

19. Right of United States to Perform

If, after thirty (30) days, or in an emergency such shorter period as shall not be unreasonable, following the making of a demand therefor by the AUTHORIZED OFFICER, HOLDER (or its agents, employees, contractors, or subcontractors) shall fail or refuse to perform any of the actions required by the provisions of this GRANT, the STIPULATIONS or applicable regulations, the United States shall have the right, but not the obligation, to perform any or all of such actions at the sole expense of the HOLDER. Prior to the delivery of any such demand, the AUTHORIZED OFFICER shall confer with the HOLDER, unless the AUTHORIZED OFFICER deems ~~it impracticable to do so, regarding the required action or~~ actions that are included in the demand.

20. Liens

A. HOLDER shall, with reasonable diligence, discharge any lien against FEDERAL LANDS that results from any failure or refusal on HOLDER'S part to pay or satisfy any judgment or obligation that arises out of or is connected in any way with the construction, OPERATION or termination of all or any part of the PIPELINE SYSTEM.

B. However, HOLDER shall prevent the foreclosure of any lien against any title, right, or interest of the United States in said lands.

C. The foregoing provisions of this Section shall not be construed to constitute the consent of the United States to the creation of any lien against FEDERAL LANDS or to be in derogation of any prohibition or limitation with respect to such liens that may now or hereafter exist.

21. Duty of HOLDER to Abate

A. HOLDER promptly shall abate, either completely or, as the case may be, as completely as possible using their best efforts, any physical or mechanical procedure, activity, event or condition, existing or occurring at any time:

- (1) that is susceptible to abatement by HOLDER;
- (2) which arises out of, or could affect adversely, the construction, OPERATION or termination of all or any part of the PIPELINE SYSTEM, and
- (3) that causes or threatens to cause:
 - (a) a hazard to the safety of workers or to public health or safety (including but not limited to personal injury or loss of life with respect to any PERSON or PERSONS),
 - (b) SIGNIFICANT DAMAGE to the environment (including but not limited to areas of vegetation or timber, fish or other wildlife populations, or their habitats, or any other natural resource) or
 - (c) SIGNIFICANT DAMAGE to subsistence use.

B. HOLDER shall cause its respective agents, employees, ~~contractors and subcontractors (at any tier) to observe and~~ comply with the foregoing provisions of this Section.

22. Temporary Suspension Orders of AUTHORIZED OFFICER

The AUTHORIZED OFFICER may at any time, and in accordance with applicable laws and regulations, order the temporary suspension of any or all construction, OPERATION or termination activities of HOLDER, its agents, employees, contractors or subcontractors (at any tier) in connection with the PIPELINE SYSTEM, including but not limited to the transportation of GAS.

23. Appeal Procedure

All appeals from decisions of the AUTHORIZED OFFICER shall be in accordance with 43 CFR, 2884.1.

24. Civil Rights

The HOLDER agrees not to exclude any person from participating in employment or procurement activity connected with this GRANT on the grounds of race, creed, color, national origin, and sex, and to ensure against such exclusions, the HOLDER further agrees to develop and submit to the proper reviewing official specific goals and timetables with respect to minority and female participation in employment and procurement activity connected with this GRANT. The HOLDER will take affirmative action to utilize business enterprises owned and controlled by minorities or women in its procurement practices connected with this GRANT. Affirmative action will be taken by the HOLDER to assure all minorities or women applicants full consideration of all employment opportunities connected with this GRANT. The HOLDER also agrees to post in conspicuous places on its premises which are available to contractors, subcontractors, employees, and other interested individuals, notices which set forth equal opportunity terms; and to notify interested individuals, such as bidders, contractors, purchasers, and labor unions or representatives of workers with whom it has collective bargaining agreements, of the HOLDER'S equal opportunity obligations.

25. Native and Other Subsistence

To the extent practicable, HOLDER shall not damage any fish, wildlife or biotic resources in the general area of the RIGHT-OF-WAY upon which PERSONS living in the area rely for subsistence purposes; and HOLDER will comply promptly with all requirements and orders of the AUTHORIZED OFFICER to protect the interests of PERSONS living in the general area of the RIGHT-OF-WAY who rely on the fish, wildlife and biotic resources of the area for subsistence purposes.

26. Termination or Suspension of RIGHT-OF-WAY

A. The Authorized Officer may institute procedures for suspension or termination of HOLDER'S RIGHT-OF-WAY GRANT pursuant to 43 CFR 2883.6 if it is determined that:

- (1) The HOLDER, its agents, employees, contractors or subcontractors (at any tier), or any of them, has failed to comply with any applicable provision of Section 28 of the Mineral Leasing Act of 1920, as amended, applicable laws or regulations, or any term, condition or stipulation of this GRANT; or

- (2) The HOLDER has deliberately failed to use the RIGHT-OF-WAY for the purpose for which it was granted or renewed for a continuous two (2) year period.

B. Upon a final adverse finding, pursuant to Section 12 of the Alaska Natural Gas Transportation Act of 1976, 15 USC 719j that export of North Slope Alaska Natural Gas is not in the National interest, or upon final denial of an export license application, this GRANT shall automatically terminate in accordance with 43 CFR 2883.6.

27. Release of RIGHT-OF-WAY

A. In connection with the relinquishment, abandonment or other termination before the expiration of the GRANT of the RIGHT-OF-WAY, of any right or interest in the RIGHT-OF-WAY, and/or in the use of all or any part of the lands subject to the RIGHT-OF-WAY, HOLDER shall promptly execute and deliver to the AUTHORIZED OFFICER, a valid instrument of release. The form and substantive content of each instrument of release shall be approved by the AUTHORIZED OFFICER but, in no event shall any such instrument operate to increase the then-existing liabilities and obligations of the HOLDER furnishing the release.

B. Each release shall be accompanied by such resolutions and certifications as the AUTHORIZED OFFICER may require in connection with the power or the authority of the HOLDER, or of any officer or agent acting on its behalf, to execute, acknowledge or deliver the release.

C. Neither the tender, nor the approval and/or acceptance, of any such release shall operate as an estoppel or waiver of any claim or judgment against HOLDER or to relieve or discharge, in whole or in part, HOLDER of and from any of its then-existing liabilities or obligations (accrued, contingent or otherwise); and, notwithstanding any such tender or delivery, or any approval of the AUTHORIZED OFFICER, if a release shall contain any provision that operates or that by implication might operate to ~~discharge or relieve HOLDER of and from any of its liabilities or obligations (accrued, contingent or otherwise) or that operates or might operate as an estoppel or waiver of any claim or judgment against HOLDER, or as a covenant not to sue, such provision shall be, and shall be deemed to be, void and of no effect whatsoever insofar as it would have the effect of so discharging or relieving HOLDER or operating as an estoppel, waiver or covenant not to sue.~~

28. Access to Documents

A. As to any documents or records not filed (or required to be filed under any other provision of this GRANT) with the SECRETARY or the AUTHORIZED OFFICER that shall be relevant to the exercise or enforcement of the AUTHORIZED OFFICER'S authority or the rights of the United States under or in connection with this GRANT or with respect to all or any part of the PIPELINE SYSTEM, the AUTHORIZED OFFICER shall have the right, after notice to HOLDER, to inspect and copy:

- (1) any document or record which HOLDER is required by this GRANT to make or maintain,
- (2) any document or record that at any time has been filed by HOLDER with any governmental department or agency, access to which is not prohibited or limited by law or regulation, or
- (3) any abstract, summary or other document that may have been prepared by any governmental department or agency in connection with any document or record referred to in (2) above.

B. Subject to the requirement that the documents or records herein below referred to shall be relevant to the exercise or enforcement of the AUTHORIZED OFFICER'S authority or the rights of the United States under or in connection with this GRANT or with respect to all or any part of the PIPELINE SYSTEM, the SECRETARY, after notice to HOLDER, may inspect and, with the consent of the HOLDER (which consent HOLDER agrees will not be unreasonably withheld or delayed), may copy any document or record that has been or may hereafter be filed by HOLDER with any governmental agency, access to which is prohibited or limited by law or regulation, and any abstract, summary or other document that may have been prepared by a governmental department or agency in connection with any such document or record; provided, however, that the rights of the AUTHORIZED OFFICER under this subsection ~~may be exercised only if, and to the extent that, this provision constitutes a valid waiver of any such prohibition or limitation.~~

C. Nothing in this section shall be deemed to limit, prohibit, or waive any right or privilege of the United States, and particularly of the AUTHORIZED OFFICER, to inspect or copy any document or record under any authority granted pursuant to law or regulations.

29. Rights of Third Parties

The parties hereto do not intend to create any rights under this GRANT that may be enforced by third parties for their own benefit or for the benefit of others.

30. Covenants Independent

Each and every covenant contained in this GRANT is, and shall be deemed to be, separate and independent of, and not dependent on, any other covenant contained in this GRANT.

31. Partial Invalidity

If any part of this GRANT is held invalid or unenforceable, the remainder of this GRANT shall not be affected and shall be valid and enforced to the fullest extent permitted by law.

32. Waiver Not Continuing

The waiver by any party hereto for non-compliance of any provision of this GRANT by any other party hereto, whether such waiver be expressed or implied, shall not be construed to be a continuing waiver or a waiver of, or consent to, any subsequent or prior non-compliance on the part of such other party, of the same or any other provision of this GRANT.

33. Remedies Cumulative; Equitable Relief

No remedy conferred by this GRANT upon or reserved to the United States or to HOLDER is intended to be exclusive of any other remedy provided for by this GRANT or by law, but each shall be cumulative and shall be in addition to every other remedy given hereunder or now or hereafter existing in equity or at law; and the United States, in a proper action instituted by it, may seek a decree against HOLDER for specific performance, injunctive or other equitable relief, as may be appropriate.

34. Section Headings

The section headings in this GRANT are for convenience only, and do not purport to, and shall not be deemed to, define, limit or extend the scope or intent of the section to which they pertain.

35. Authority to Enter GRANT

HOLDER represents and warrants to the United States that:

A. it is duly authorized and empowered under the applicable laws of the State of its incorporation and by its charter and by-laws to enter into and perform this GRANT in accordance with the provisions hereof;

B. its board of directors, or duly authorized executive committee, has duly approved, and has duly authorized, the execution, delivery and performance by it of this GRANT;

C. all corporate and shareholder action that may be necessary or incidental to the approval of this GRANT, and the due execution, delivery and performance hereof by HOLDER, has been taken; and

D. that all of the foregoing approvals, authorizations and actions are in full force and effect at the time of the execution and delivery of this GRANT.

36. Acceptance of GRANT

HOLDERS execution of this GRANT signifies acceptance of the terms and conditions contained herein. Such acceptance constitutes an agreement between the HOLDER and the United States that, in consideration of the right to use FEDERAL LANDS, HOLDERS will comply with all terms and conditions contained in this GRANT and applicable laws and regulations.

IN WITNESS WHEREOF:

the parties hereto have duly executed this GRANT.

UNITED STATES OF AMERICA

Michael J. Penfold

Date 10-17-88

By Michael J. Penfold
AUTHORIZED OFFICER
Alaska State Director
Bureau of Land Management

YUKON PACIFIC CORPORATION

Howard D. Griffith

Date 10-17-88

By Howard D. Griffith
PRESIDENT
Chief Executive Officer

ATTEST:

Jeffery B. Lowenfels
By Jeffery B. Lowenfels
Secretary
General Counsel

(SEAL)



EXHIBIT B
STIPULATIONS FOR THE GRANT OF RIGHT-OF-WAY
FOR THE TRANS-ALASKA GAS SYSTEM

Table of Contents

	Preamble
1.	General
1.1.	Definitions
1.2.	Responsibilities
1.3.	AUTHORIZED OFFICER
1.4.	Agent of HOLDER
1.5.	Authority of Representatives of AUTHORIZED OFFICER and Agent; Orders of AUTHORIZED OFFICER
1.6.	Orders and Notices
1.7.	DESIGN CRITERIA, Plans and Programs
1.8.	Network Analysis Diagrams
1.9.	NOTICE TO PROCEED
1.10.	Application for NOTICE TO PROCEED
1.11.	Changes in Conditions
1.12.	Cultural Resources
1.13.	Completion of Use
1.14.	Public and Private Improvements
1.15.	Regulation of Public Access
1.16.	Electronically Operated Devices
1.17.	Hunting, Fishing and Trapping
1.18.	Small Craft Passage
1.19.	Protection of Survey Monuments
1.20.	Fire Prevention and Suppression
1.21.	Surveillance and Maintenance
1.22.	Quarters, Transportation and Communications
1.23.	Health and Safety
1.24.	Conduct of OPERATIONS
1.25.	Applicability of Stipulations
2.	ENVIRONMENTAL
2.1.	Environmental Briefings
2.2.	Pollution Control
2.2.1.	General
2.2.2.	Air and Water Pollution
2.2.3.	Pesticides, Herbicides and Other Chemicals
2.2.4.	WASTE Disposal
2.3.	Buffer Strips
2.3.1.	Public Interest Areas
2.3.2.	Vegetative Screen
2.4.	Erosion and Sedimentation Control
2.4.1.	General
2.4.2.	Crossing of Wetlands, Streams, Rivers or Floodplains
2.4.3.	Excavated Material

- 2.5. Fish and Wildlife Protection
- 2.5.1. Fish
- 2.5.2. Big Game Movements
- 2.5.3. Zones of Restricted Activity
- 2.6. Mineral Material Sites
- 2.7. Clearing
- 2.7.1. Boundaries
- 2.7.2. Timber
- 2.8. Disturbance or Use of Natural Water
- 2.9. Off RIGHT-OF-WAY Traffic
- 2.10. Visual Resources
- 2.11. Use of Explosives
- 2.12. RESTORATION
- 2.13. Reporting, Prevention, Control, Cleanup and Disposal
of OIL and HAZARDOUS SUBSTANCES Discharges
- 2.14. PIPELINE Contingency Plan

- 3. TECHNICAL
- 3.1. PIPELINE SYSTEMS Standards
- 3.2. Special Standards
- 3.3. Standards for ACCESS ROADS
- 3.4. CONSTRUCTION MODE Requirements
- 3.5. Earthquakes and Fault Displacements
- 3.5.1. Earthquakes
- 3.5.2. Fault Displacements
- 3.6. Slope Stability
- 3.7. WETLANDS, River, Stream and Floodplain Crossings
and Erosion
- 3.7.1. General
- 3.7.2. Culverts and Bridges
- 3.7.3. Erosion
- 3.8. Construction and OPERATION
- 3.9. Containment of Spills of OIL and Other HAZARDOUS
SUBSTANCES

PREAMBLE

Principles:

In the implementation of the GRANT of RIGHT-OF-WAY for the TRANS-ALASKA GAS SYSTEM of which these STIPULATIONS are a part, the following principles shall apply:

- (1) In the construction, OPERATION (including but not limited to a continuing and reasonable program of preventive maintenance) and termination of the PIPELINE SYSTEM, the HOLDER shall employ all practicable means and measures to preserve and protect the environment, as provided in this GRANT of RIGHT-OF-WAY.
- (2) The HOLDER and the United States shall balance environmental amenities and values with economic practicalities and technical capabilities, so as to be consistent with applicable national policies. In so doing, they shall take into account, among other considerations, the following:
 - (a) The benefit or detriment to persons, property, and the environment that may be anticipated to result from a proposed course of conduct;
 - (b) The particular environmental and technical benefits, costs or detriments reasonably expected to flow from a proposed course of conduct.
- (3) The HOLDER shall plan, manage, supervise, and implement the construction, OPERATION and termination of the PIPELINE SYSTEM in accordance with sound engineering practices.

Scope:

~~The Following STIPULATIONS set forth the standards of performance to be observed and maintained during the construction, OPERATION and termination of the PIPELINE SYSTEM.~~

These STIPULATIONS are not intended in any way to derogate from, or be construed as being inconsistent with, applicable provisions of law.

Nothing in these STIPULATIONS shall be construed as applying to activities of the HOLDER that have no relation to the PIPELINE SYSTEM.

1. GENERAL

1.1. Definitions

1.1.1. As used in these STIPULATIONS and elsewhere in this "RIGHT-OF-WAY GRANT for the TRANS-ALASKA GAS SYSTEM", the following terms have the following meanings:

1.1.1.1. "ACCESS ROADS" means roads on FEDERAL LANDS, other than State or public highways, that are constructed or used by HOLDER in connection with the construction, OPERATION or termination of the PIPELINE SYSTEM.

1.1.1.2. "ACT" means Section 28 of the Mineral Leasing Act of 1920, as amended, 30 U.S.C. 185 [Source - 43 CFR Subpart 2880.0-5(a)].

1.1.1.3. "ALASKA NATURAL GAS TRANSPORTATION SYSTEM" means the pipeline system referred to in and authorized by the Alaska Natural Gas Transportation Act of 1976, 15 U.S.C. 719, et seq, and the Grant of Right-of-Way for the Alaska Natural Gas Transportation System (F-24538).

1.1.1.4. "AUTHORIZED OFFICER" means any employee of the DEPARTMENT to whom has been delegated the authority to perform the duties described in this GRANT [Source - 43 CFR Subpart 2880.0-5(d)].

1.1.1.5. "BUSINESS ENTITY" means an artificial legal entity, formed to conduct one or more ventures for profit, or not for profit, that is duly authorized and empowered to sue and be sued, and to hold the title to property, in its own name.

1.1.1.6. "CONSTRUCTION MODE" means the type of construction to be employed generally with regard to the PIPELINE and with respect to specific engineering, geotechnical and environmental parameters and operational concepts.

1.1.1.7. "CONSTRUCTION SEGMENT" means a physical portion of the PIPELINE SYSTEM, as agreed upon by HOLDER and the AUTHORIZED OFFICER, ~~that constitutes a complete portion or stage, in and of itself, which can be constructed independently of any other portion or stage of the PIPELINE SYSTEM in a designated geographical area.~~

1.1.1.8. "DEPARTMENT" means the Department of the Interior.

1.1.1.9. "DESIGN CRITERIA" means project criteria, i.e., construction, including design, and operational concepts necessary to delineate the project to be constructed. As a minimum, it includes the following: criteria to be used for the FINAL DESIGN and project concepts, evaluation of data used to establish the DESIGN CRITERIA, drawings showing functional and technical

requirements, reports of all test data compiled during the data collection and DESIGN CRITERIA evaluation, standard drawings (if applicable) or drawings to support structural design concepts of each typical facility or structure, proposed CONSTRUCTION MODES, outline of project specifications, sample computations to support the design, and concepts and bases for project siting.

1.1.1.10. "FEDERAL LANDS" means all lands owned by the United States except lands in the National Park System, lands held in trust for an Indian or Indian tribe and lands on the Outer Continental Shelf [Source - 43 CFR Subpart 2880.0-5(e)].

1.1.1.11. "FIELD TURN-ON" means an appropriate written authorization issued by the AUTHORIZED OFFICER, or his designee in the field to allow initiation of any activity on FEDERAL LAND in conjunction with the construction, OPERATION and termination of the PIPELINE SYSTEM.

1.1.1.12. "FINAL DESIGN" means completed design documents suitable for bid solicitation including:

- A. contract plans and specifications,
- B. proposed CONSTRUCTION MODES,
- C. operational requirements necessary to justify designs,
- D. design analysis,
- E. including calculations for each particular design feature,
- F. all functional and engineering criteria,
- G. summaries of engineering tests conducted and their results, and
- H. other considerations pertinent to design.

1.1.1.13. "FISH OVERWINTERING AREAS" means those areas inhabited by fish between freezeup and breakup.

1.1.1.14. "FISH SPAWNING AREAS" means those areas where anadromous and resident fish deposit their eggs.

1.1.1.15. "FISH REARING AREAS" means those areas inhabited by fish during any life stage.

1.1.1.16. "GAS" means a gaseous mixture, principally of methane and other paraffinic hydrocarbons, suitably conditioned to an acceptable specification of the HOLDER and appropriate regulatory agencies for transportation by the PIPELINE.

1.1.1.17. "GRANT" as used in this document refers to this "RIGHT-OF-WAY GRANT for the TRANS-ALASKA GAS SYSTEM" and means a document authorizing a nonpossessory, nonexclusive right to use FEDERAL LANDS for the limited purpose of construction, OPERATION and termination of the PIPELINE [Source - 43 CFR Subpart 2880.0-5(n)].

1.1.1.18. "HAZARDOUS SUBSTANCES" is used as defined by the State of Alaska Department of Environmental Conservation, Environmental Protection Agency, the Department of Transportation or as specified in writing by the AUTHORIZED OFFICER in consultation with these Departments or agencies during the review of the HOLDER'S OIL and HAZARDOUS SUBSTANCES control, cleanup and disposal plan.

1.1.1.19. "HOLDER" means the Yukon Pacific Corporation or its respective successors or assigns.

1.1.1.20. "MAPPING SEGMENT" means a CONSTRUCTION SEGMENT or any part thereof, as determined by the AUTHORIZED OFFICER, provided, however, that with respect to a compressor station, basic communication site, remote control valve site, mechanical refrigeration equipment site and any other like RELATED FACILITY, a MAPPING SEGMENT means the entire site.

1.1.1.21. "NOTICE TO PROCEED" means a written permission to initiate field activities in accordance with STIPULATION 1.9.

1.1.1.22. "OIL" means oil of any kind or any form, including but not limited to.. petroleum, fuel oil, sludge, oil refuse and oil mixed with WASTE other than dredged spoil (Source - Clean Water Act as amended).

1.1.1.23. "OPERATION" means all activities related to the act of transporting GAS, including maintenance and repair of the PIPELINE SYSTEM and the fulfillment of all obligations under this GRANT of RIGHT-OF-WAY.

1.1.1.24. "PERSON" means a natural person.

1.1.1.25. "PERSONS" means more than one PERSON.

1.1.1.26. "PIPELINE" means all parts of those physical facilities, authorized on Federal lands by the U.S. Department of the Interior RIGHT-OF-WAY GRANT Nos. AA-53559 and F-83941, through which the GAS moves. This term includes RELATED FACILITIES.

1.1.1.27. "PRECONSTRUCTION" means all activities associated with planning and designing the PIPELINE SYSTEM.

1.1.1.28. "PIPELINE SYSTEM" means all facilities on FEDERAL LANDS which are constructed or used by the HOLDER in connection with the construction, OPERATION or termination of the PIPELINE. The term includes the PIPELINE and RELATED FACILITIES, temporary facilities, temporary use areas and material sites used by the HOLDER for the construction, OPERATION or termination of the PIPELINE. It does not include facilities, such as urban administrative offices, which are only indirectly involved in the transportation of GAS; nor does it include facilities used by others in the production, gathering or conditioning of GAS.

1.1.1.29. "RELATED FACILITIES" means those structures, devices, improvements, and sites on FEDERAL LANDS other than the pipe, the substantially continuous use of which is necessary for the OPERATION of the PIPELINE. RELATED FACILITIES includes supporting structures, air fields, ACCESS ROADS, compressor stations, valves and other control devices, bridges, culverts and low-water crossings, monitoring and communication devices, retaining walls, berms, dikes, ditches, cuts and fills, including hydraulic and erosion control structures, structures and areas for storing supplies and equipment, cathodic protection devices, and other facilities of a similar nature together with related yards, fences, and buildings as the AUTHORIZED OFFICER, after consultation with the HOLDER, shall determine to be RELATED FACILITIES.

"RELATED FACILITIES" not authorized by this GRANT include ACCESS ROADS, communication sites and airstrips. Authorizations for such RELATED FACILITIES shall be given by other instruments.

"RELATED FACILITIES" does not mean those structures, devices, improvements, sites, facilities or areas, the use of which is temporary in nature such as those used only for construction purposes. Among such are: temporary camps, temporary landing strips, temporary bridges, temporary ACCESS ROADS, temporary communication sites, temporary storage sites, and temporary disposal sites.

1.1.1.30. "RESTORE/RESTORATION" means to return a disturbed area to a natural or near natural condition, unless otherwise approved by the AUTHORIZED OFFICER. Restoration includes, where appropriate, erosion and sediment controls, stream rehabilitation, REVEGETATION, reestablishment of native species, visual amelioration and stabilization.

1.1.1.31. "REVEGETATION" means the establishment of plant cover on disturbed lands through techniques including, but not limited to, seedbed preparation, seeding, planting, fertilizing, mulching, and watering.

1.1.1.32. "RIGHT-OF-WAY" means the FEDERAL LANDS authorized to be occupied pursuant to this GRANT.

1.1.1.33. "SECRETARY" means the Secretary of the Interior.

1.1.1.34. "SIGNIFICANT DAMAGE" means a measurable and persistent adverse change, not attributable to natural fluctuation in the environment or in the size, productivity, or distribution of a fish, bird or mammal population, or in an area's carrying capacity for such a population, or in the availability of such a population for human use.

1.1.1.35. "STANDARD PROJECT FLOOD" is defined in U.S. Army Corps of Engineers Bulletin 52-8, Part 1.

1.1.1.36. "STIPULATION or STIPULATIONS" means RIGHT-OF-WAY GRANT STIPULATIONS for the TRANS-ALASKA GAS SYSTEM (Exhibit B).

1.1.1.37. "TRANS-ALASKA PIPELINE SYSTEM" means the pipeline system referred to in and authorized by the Trans-Alaska Pipeline Authorization Act, Title II, P.L. 93-153, 87 Stat. 584, and the Agreement and Grant of Right-of-Way for the TRANS-ALASKA PIPELINE SYSTEM (F-12505 and AA-5847).

1.1.1.38. "WASTE" means all discarded matter, other than construction spoil. It includes but is not limited to, human waste, trash, garbage, refuse, OIL drums, petroleum products, ashes and equipment.

1.1.1.39. "WETLANDS" means those areas that are inundated or saturated by surface or ground water at a frequency and duration sufficient to support, and that under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions. WETLANDS generally include swamps, marshes, bogs, and similar areas.

1.2. Responsibilities

1.2.1. Except where AUTHORIZED OFFICER approval is required before HOLDER may commence a particular operation, neither the United States nor any of its agents or employees agrees, or is in any way obligated, to examine or review any plan, design, specification or other document which may be filed with the AUTHORIZED OFFICER by HOLDER pursuant to these STIPULATIONS.

1.2.2. With regard to the construction, OPERATION or termination of the PIPELINE SYSTEM:

A. HOLDER shall ensure full compliance with the provisions of this GRANT, including these STIPULATIONS, by HOLDER'S employees, agents, contractors, subcontractors of any tier and the employees of each of them;

B. unless clearly inapplicable, the requirements and prohibitions imposed upon HOLDER by these STIPULATIONS are also imposed upon HOLDER'S agents, employees, contractors and subcontractors and the employees of each of them;

C. failure or refusal of HOLDER'S agents, employees, contractors or subcontractors and the employees of each of them, to comply with these STIPULATIONS shall be deemed to be the failure or refusal of the HOLDER;

D. HOLDER shall require its agents, contractors and subcontractors to include these STIPULATIONS in all contracts and subcontracts which are entered into by any of them, together with a provision that the other contracting party, together with its agents, employees, contractors and subcontractors, and the employees of each of them, shall likewise be bound to comply with these STIPULATIONS;

E. HOLDER shall demonstrate that the requirements in STIPULATIONS 1.2.2. A through D above have been accomplished at least quarterly unless otherwise approved by the AUTHORIZED OFFICER.

1.2.3. In the implementation of STIPULATION 1.2.2., the HOLDER will furnish all supervisory-level employees with copies of these STIPULATIONS and will explain the limitations imposed by these STIPULATIONS.

1.2.4. HOLDER shall make separate application to the AUTHORIZED OFFICER, under applicable statutes and regulations, for authorization to use or occupy FEDERAL LANDS in connection with the PIPELINE SYSTEM where the lands are not within the RIGHT-OF-WAY granted.

1.2.5. HOLDER shall not interfere with operations of the TRANS-ALASKA PIPELINE SYSTEM or any other authorizations as such system or authorization encumbers FEDERAL LANDS pursuant to right-of-way grants, permits or other authorizations of the United States, or with the activities of employees, contractors, subcontractors and agents of the TRANS-ALASKA PIPELINE SYSTEM or any other authorized entity, except as may be approved in writing by the AUTHORIZED OFFICER.

1.2.6. HOLDER shall not interfere with PRE-CONSTRUCTION, construction and OPERATIONS of the ALASKA NATURAL GAS TRANSPORTATION SYSTEM as such system encumbers FEDERAL LANDS pursuant to right-of-way grants, permits or other authorizations of the United States, or with the activities of employees, contractors, subcontractors and agents of the ALASKA NATURAL GAS TRANSPORTATION SYSTEM except as may be approved in writing by the AUTHORIZED OFFICER.

1.3. AUTHORIZED OFFICER

1.3.1. For purposes of information and review, the AUTHORIZED OFFICER may call upon HOLDER at any time to furnish any or all data related to design, construction, OPERATION or termination activities undertaken in connection with the PIPELINE SYSTEM.

1.3.2. The absence of any comment by the AUTHORIZED OFFICER or his designated representative on any plan, design, specification, or other document which may be filed by the HOLDER with the AUTHORIZED OFFICER shall not be deemed to represent in any way whatever any assent to, approval of, or concurrence in such plan, design, specification or other document, or any action proposed therein. Any written approval or instruction by the AUTHORIZED OFFICER may be relied upon by the HOLDER unless and until rescinded in writing. The AUTHORIZED OFFICER, shall act in writing upon each submission to him in accordance with the agreed-upon schedule developed pursuant to STIPULATIONS 1.7.2. and 1.9.4. Any disapproving action by the AUTHORIZED OFFICER including any requests for additional information, shall state what additional action is necessary to gain approval.

1.3.3. The AUTHORIZED OFFICER may require HOLDER to make such modification of the PIPELINE SYSTEM during PRE-CONSTRUCTION, construction, OPERATION and termination without liability or expense to the United States, as deemed necessary to:

A. protect or maintain stability of foundation and geologic materials;

B. protect or maintain integrity of the PIPELINE SYSTEM;

C. prevent SIGNIFICANT DAMAGE to the environment (including but not limited to fish and wildlife populations or their habitats);

D. protect or maintain subsistence uses;

E. remove hazards to public health and safety;

~~F. protect the TRANS-ALASKA PIPELINE SYSTEM and the ALASKA NATURAL GAS TRANSPORTATION SYSTEM from any adverse effects of HOLDER'S activities, including the activities of HOLDER'S agents, employees, contractors, subcontractors and the employees of each of them.~~

1.4. Agent of HOLDER

1.4.1. If HOLDER appoints an agent to design, construct, operate, maintain and terminate the PIPELINE SYSTEM under and pursuant to this GRANT, HOLDER shall file a Power of Attorney with the Department of the Interior appointing such agent as their true and lawful agent and attorney-in-fact on behalf of HOLDER with full

power and authority to execute and deliver any and all instruments in connection with the design, construction, OPERATION and termination of the PIPELINE SYSTEM. Within the scope of such contractual authority, such agent shall represent HOLDER with respect to this GRANT. Such agent shall be empowered on behalf of HOLDER to accept service of any process, pleadings or other documents in connection with court or administrative proceedings relating in whole or in part to this GRANT or to all or any part of the PIPELINE SYSTEM and to which the United States shall be a party.

1.4.2. If HOLDER maintains an agent for the design, construction, OPERATION and termination of the PIPELINE SYSTEM such agent shall be a citizen of the United States or if a corporation, a domestic corporation. Such agent shall be a resident of Alaska or if a corporation, shall be duly authorized to conduct business in Alaska. HOLDER shall cause such agent to maintain at all times during this GRANT, an office in the State of Alaska for the delivery of all documents, orders, notices and other written communications as provided for in STIPULATIONS 1.5. and 1.6.

1.4.3. If HOLDER substitutes a new agent at any time, HOLDER shall give prompt written notice to the AUTHORIZED OFFICER of such substitution and provide the name and office address in the State of Alaska of the new agent and a copy of HOLDER'S agreement with the new agent. The United States shall be entitled to rely on each appointment until such time as a notice of substitution of a new agent takes effect. Each such notice of substitution shall not take effect until at least two (2) full working days after (and not including) the date that it was received by the AUTHORIZED OFFICER.

1.5. Authority of Representatives of AUTHORIZED OFFICER and Agent; Orders of AUTHORIZED OFFICER

1.5.1. No order or notice given to HOLDER on behalf of the SECRETARY by the AUTHORIZED OFFICER or any other PERSON shall be effective as to HOLDER unless prior written notice of the delegation of authority to issue such order or notice has been given to HOLDER in the manner provided in STIPULATION 1.6.

1.5.2. HOLDER shall comply with each and every lawful order directed to them and that is issued by the SECRETARY, the AUTHORIZED OFFICER or by a duly authorized representative of the AUTHORIZED OFFICER.

1.5.3. HOLDER or its agent if so appointed shall maintain a sufficient number of its duly authorized representatives to allow for the prompt delivery to HOLDER of all notices, orders and other communications, written or oral, of the SECRETARY or AUTHORIZED OFFICER. Each of the agent's duly authorized representatives shall be registered with the AUTHORIZED OFFICER and shall be

appropriately identified in such a manner and on such terms as the AUTHORIZED OFFICER shall prescribe. HOLDER shall cause its agent to consult with the AUTHORIZED OFFICER at any time regarding the number and location of such representatives of the agent.

1.6. Orders and Notices

1.6.1. All decisions, determinations, authorizations, approvals, consents, demands or directions that shall be made or given by the SECRETARY or the AUTHORIZED OFFICER to the HOLDER in connection with the enforcement or administration of the GRANT, any applicable law, regulation or any other grant, permit or authorization relating in whole or in part to all or any part of the PIPELINE SYSTEM shall, except as otherwise provided in STIPULATION 1.6.2., be in the form of a written order or notice.

1.6.2. If, in the judgment of the SECRETARY or the AUTHORIZED OFFICER, there is an emergency that necessitates the immediate issuance to the HOLDER of an order or notice, such order or notice may be given orally, provided, however, that subsequent confirmation of the order or notice shall be given in writing as rapidly as is practicable under the circumstances.

1.6.3. All written orders, notices, telegrams or other written communications that are addressed to the HOLDER shall be deemed to have been delivered to and received by the addressee when the order, notice, telegram or other written communication has been delivered:

A. either by messenger during normal business hours or by means of registered or certified United States mail, postage prepaid, return receipt requested, to the office of the HOLDER or the agent of the HOLDER in the State of Alaska, or

B. personally to any authorized representative of the HOLDER or its agent.

1.6.4. All written notices, telegrams or other written communications relating to any subject from the HOLDER that are ~~addressed to the AUTHORIZED OFFICER shall be deemed to have been delivered to and received by the AUTHORIZED OFFICER when the notice, telegram or other written communication has been delivered either by messenger during normal business hours or by means of a registered or certified United States mail, postage prepaid, return receipt requested, to the AUTHORIZED OFFICER personally or to the Office of the Alaska State Director, U.S. Bureau of Land Management, 701 C Street, Box 30, Anchorage, Alaska 99513.~~

1.6.5. The United States or HOLDER may, by written notice to the other, change the office addresses to which written notices, orders, telegrams or other written communications may be addressed and delivered thereafter.

1.7. DESIGN CRITERIA; Plans and Programs

1.7.1. In order to streamline final design review, HOLDER shall submit DESIGN CRITERIA to the AUTHORIZED OFFICER. The DESIGN CRITERIA, including the plans and programs specified in STIPULATION 1.7.2., shall be approved prior to initiation of FINAL DESIGN by the AUTHORIZED OFFICER and shall be complied with by the HOLDER.

1.7.2. HOLDER shall also submit comprehensive plans and/or programs (including schedules where appropriate) which shall include but not be limited to the following:

- A. Air quality
- B. ACCESS ROADS
- C. Blasting
- D. Camps
- E. Clearing
- F. Corrosion control
- G. Cultural resource preservation
- H. Environmental briefings
- I. Erosion and sedimentation control
- J. Fire control
- K. Geologic hazards
- L. Human-carnivore interaction
- M. Liquid waste management
- N. Mineral Material exploration and extraction
- O. OIL and HAZARDOUS SUBSTANCES control, cleanup and disposal
- P. Overburden and excess material disposal
- Q. Pesticides, herbicides, chemicals
- R. PIPELINE contingency
- S. Quality assurance/quality control
- T. Restoration
- U. River training structures
- V. Siting of compressor stations
- W. Snow and ice workpads and snow and ice ACCESS ROADS
- X. Solid WASTE management
- Y. Stream, river and floodplain crossings
- Z. ~~Surveillance and maintenance~~
- AA. Visual resources
- BB. WETLAND construction

These plans and programs may be combined as appropriate. HOLDER and the AUTHORIZED OFFICER shall agree to the scope, content and schedule for submission of the requested plans and programs. Any aspects of these plans and programs or the DESIGN CRITERIA that are likely to have a significant impact upon other facilities (such as the TRANS-ALASKA PIPELINE SYSTEM and the ALASKA NATURAL GAS TRANSPORTATION SYSTEM) shall be coordinated by the HOLDER with the owners of such other facilities during their development. The HOLDER, in particular, shall coordinate with the State of Alaska

regarding the PIPELINE SYSTEM alignment between Prudhoe Bay and Valdez. Coordination means providing the other facility owner an opportunity to review and comment upon relevant parts of the plans and programs. The HOLDER shall reasonably take these comments into consideration. Coordination does not necessarily mean concurrence. Evidence of such coordination must be provided in support of any application for a NOTICE TO PROCEED. In determining the acceptability of the DESIGN CRITERIA and the plans, the AUTHORIZED OFFICER shall consider suggestions or objections submitted by owners of affected facilities.

1.7.3. Additional or supplementary plans may be required in the event that the Plans submitted in accordance with STIPULATION 1.8.2. do not provide the detailed and/or site-specific data required to support the FINAL DESIGN required in STIPULATION 1.11., or to guide the conduct of the construction, OPERATION and termination of the PIPELINE SYSTEM.

1.8. Summary Network Analysis Diagrams

1.8.1. As part of the DESIGN CRITERIA, the HOLDER shall submit a summary network analysis diagram for the project to the AUTHORIZED OFFICER for review and approval. The summary network analysis diagram shall include all environmental, engineering and construction-related activities and contingencies which reasonably may be anticipated in connection with the project.

The summary network analysis diagram shall include or address:

- A. data collection activities;
- B. submittal and approval activities;
- C. construction and post construction activities;
- D. schedule control techniques;
- E. submittal of NOTICE TO PROCEED applications;
- F. environmental constraints on construction scheduling; and
- G. other pertinent data.

The summary network analysis diagram shall be prepared employing techniques normal to the industry in sufficient detail and scope to permit the AUTHORIZED OFFICER to determine if the management approach shown or inferred by the network analysis will facilitate the cost-effective, environmentally sound, and timely construction of the project consistent with the protection of public health and safety.

1.8.2. The summary network analysis diagram shall be updated to indicate current and planned activities at intervals mutually agreeable to the HOLDER and the AUTHORIZED OFFICER.

1.9. NOTICE TO PROCEED

1.9.1. The HOLDER shall not initiate any activity on FEDERAL LANDS pursuant to the authorization of which these STIPULATIONS are a part without prior specific written permission. Such permission shall be given either by a NOTICE TO PROCEED or other appropriate written authorization, issued by the AUTHORIZED OFFICER , as appropriate. Any NOTICE TO PROCEED or other authorization shall permit activities only as therein expressly stated and only for the particular activities therein described. A NOTICE TO PROCEED or other appropriate authorization may contain such site-specific terms and conditions as the AUTHORIZED OFFICER deems necessary to implement these STIPULATIONS, and the HOLDER shall comply with such terms and conditions. All NOTICES TO PROCEED will contain a provision requiring a FIELD TURN-ON prior to initiation of activities.

1.9.2. The AUTHORIZED OFFICER shall issue a NOTICE TO PROCEED only when, in his judgment, applicable FINAL DESIGNS and other submissions required by STIPULATIONS 1.7.2., 1.7.3. and 1.10.4. conform to these STIPULATIONS.

1.9.3. By written order, following appropriate consultation with the HOLDER, and when other enforcement actions are inadequate or have not been successful, the AUTHORIZED OFFICER may revoke or suspend in whole or in part any NOTICE TO PROCEED which has been issued when, in his judgment, unforeseen conditions later arising require alterations in the NOTICE TO PROCEED in order to:

A. protect or maintain stability of foundation and earth materials;

B. protect or maintain integrity of the PIPELINE SYSTEM;

C. control or prevent SIGNIFICANT DAMAGE to the environment, including but not limited to fish and wildlife populations and their habitats; or

D. remove hazards to public health and safety.

The AUTHORIZED OFFICER shall expeditiously follow his revocation or suspension order with a more detailed written statement of the reason for the action.

1.9.4. Prior to submission of any applications for NOTICES TO PROCEED, the HOLDER and the AUTHORIZED OFFICER shall agree to a schedule for the submission, review and approval of such applications and on the scope of information to be contained therein. The schedule shall allow the AUTHORIZED OFFICER 60 days for review of each complete application for a NOTICE TO PROCEED

unless the AUTHORIZED OFFICER gives written notice that more time is needed. The schedule may be revised by mutual agreement, if necessary.

1.9.5. The AUTHORIZED OFFICER shall review each application for a NOTICE TO PROCEED and all data submitted in connection therewith in accordance with schedules as agreed upon pursuant to STIPULATION 1.9.4.

1.10. Application for NOTICE TO PROCEED

1.10.1. Before applying for any NOTICE TO PROCEED for field activities, HOLDER shall, unless otherwise authorized, by survey, locate and clearly mark on the ground the proposed centerline of the PIPELINE and the location of all other RELATED FACILITIES in the proposed work area in a manner acceptable to the AUTHORIZED OFFICER.

1.10.2. When the HOLDER is engaged in field activities proximate to the TRANS-ALASKA PIPELINE SYSTEM or, in any event, when any HOLDER field activities could pose a threat to the integrity of the TRANS-ALASKA PIPELINE SYSTEM, the HOLDER shall arrange with the owners of the TRANS-ALASKA PIPELINE SYSTEM, in accordance with industry practice, for the agent for the TRANS-ALASKA PIPELINE SYSTEM to survey and clearly mark on the ground the relevant threatened parts of the TRANS-ALASKA PIPELINE SYSTEM to the satisfaction of the AUTHORIZED OFFICER.

1.10.3. When Holder is engaged in field activities proximate to the ALASKA NATURAL GAS TRANSPORTATION SYSTEM or, in any event, when any HOLDER field activities could pose a threat to the integrity of the ALASKA NATURAL GAS TRANSPORTATION SYSTEM, the HOLDER shall arrange with the owners of the ALASKA NATURAL GAS TRANSPORTATION SYSTEM, in accordance with industry practice, to survey and clearly mark on the ground the relevant threatened parts of the ALASKA NATURAL GAS TRANSPORTATION SYSTEM to the satisfaction of the AUTHORIZED OFFICER. Provided, that until such time as NOTICES TO PROCEED have been issued for the construction of the ALASKA NATURAL GAS TRANSPORTATION SYSTEM between Prudhoe Bay and Delta Junction in Alaska, ~~HOLDER will be required only to protect the existing rights of the owners of the ALASKA NATURAL GAS TRANSPORTATION SYSTEM on FEDERAL LANDS. HOLDER will notify the owners of the ALASKA NATURAL GAS TRANSPORTATION SYSTEM of its intent to obtain NOTICES TO PROCEED for its project. Said owners will have opportunity to review and comment on applications for NOTICE TO PROCEED when such applications are within 200 feet of the ALASKA NATURAL GAS TRANSPORTATION SYSTEM on FEDERAL LANDS and do not contain proprietary or confidential information.~~

1.10.4. Each application for an NOTICE TO PROCEED shall include, but is not limited to:

A. a FINAL DESIGN;

B. all reports and results of environmental analysis including subsistence issues, conducted or considered by HOLDER;

C. all data necessary to demonstrate compliance with the terms and conditions of this GRANT with respect to the proposed activity including permits or authorizations required by appropriate Federal and State agencies,

D. a detailed network analysis diagram including the following for the proposed activity: work schedules; permits or authorizations required and their interrelationships; design and review periods; data collection activities and construction sequencing. This detailed network analysis diagram shall be updated as required to reflect current status of the activity;

E. a map or maps, acceptable to the AUTHORIZED OFFICER, depicting the specific location of all existing improvements, buried or aboveground in the proposed area to be affected and depicting the proposed locations of:

- (1) the boundaries of all associated temporary use areas;
- (2) all improvements, buried or aboveground, proposed for construction; and
- (3) the relative location of any part of the TRANS-ALASKA PIPELINE SYSTEM and the ALASKA NATURAL GAS TRANSPORTATION SYSTEM that is proximate to the proposed improvements.

1.10.5. A NOTICE TO PROCEED shall not be issued until the AUTHORIZED OFFICER has approved all relevant locations on the ground and temporary boundary markers have been set by HOLDER to the satisfaction of the AUTHORIZED OFFICER:

A. a separate analysis which addresses and evaluates the effects of the PIPELINE SYSTEM and proposed activity on the ~~TRANS-ALASKA PIPELINE SYSTEM and the ALASKA NATURAL GAS TRANSPORTATION SYSTEM;~~

B. an analysis which describes systems designed to ensure protection of the TRANS-ALASKA PIPELINE SYSTEM, the ALASKA NATURAL GAS TRANSPORTATION SYSTEM and other existing facilities from damage arising from the construction, OPERATION and termination of the PIPELINE SYSTEM;

C. evidence that the HOLDER has coordinated with the owners, agents and/or operators of the TRANS-ALASKA PIPELINE SYSTEM, the ALASKA NATURAL GAS TRANSPORTATION SYSTEM or any other existing or proposed facilities as may be required by the AUTHORIZED OFFICER;

D. the specific quality control program for all activities included in the application for NOTICE TO PROCEED including what special precautions HOLDER will execute when operating in proximity to existing facilities of the TRANS-ALASKA PIPELINE SYSTEM and the ALASKA NATURAL GAS TRANSPORTATION SYSTEM; and

E. such other data as may be requested by the AUTHORIZED OFFICER either prior to submission of the application for an NOTICE TO PROCEED or at any time during the review period.

1.10.6. During review of an application for a NOTICE TO PROCEED, the relevant portion of the route of the PIPELINE may be modified by the AUTHORIZED OFFICER, if, in his judgment environmental conditions or new technological developments warrant the modifications. During construction if adverse physical or environmental conditions are encountered that were not known to exist, or that were known to exist but their significance was not fully appreciated when the AUTHORIZED OFFICER issued a NOTICE TO PROCEED, the AUTHORIZED OFFICER may authorize deviations from the initially approved location of the PIPELINE to another location along the same general route of the PIPELINE at the point or points where the conditions are encountered, including adequate room for structurally sound transitions. HOLDER shall not make a deviation without the prior written approval of the AUTHORIZED OFFICER and, if so approved, all subsequent HOLDER activity shall conform in all respects to the provisions of the approval.

1.11. Changes in Conditions

1.11.1. Unforeseen conditions arising during construction, OPERATION or termination of the PIPELINE SYSTEM may make it necessary to revise or amend these STIPULATIONS to control or prevent damage to the environment (including fish and wildlife and/or their habitats), to protect or maintain subsistence use or prevent hazards to public health and safety. In that event, HOLDER and the AUTHORIZED OFFICER shall agree as what revisions or amendments shall be made. If they are unable to agree, the SECRETARY shall have final authority to determine the matter.

1.12. Cultural Resources

1.12.1. The HOLDER shall undertake the affirmative responsibility to identify, protect and preserve cultural, historic, prehistoric and archeological resources that may be impacted by its activities in the overall construction project in the State of Alaska on both Federal and non-Federal lands consistent with the National Historic Preservation Act of 1966, as amended, 16 U.S.C. 470, et seq., the Archaeological and Historic Preservation Act of 1974, 16 U.S.C. 469, et seq., and the implementing procedures of the Advisory Council on Historic Preservation, 36 CFR Part 800. This responsibility will be executed in a manner consistent with the

terms of a Memorandum of Agreement, under Section 106 of the National Historic Preservation Act of 1966, 16 U.S.C. 470f, as amended, between the Advisory Council on Historic Preservation, the State Historic Preservation Officer, and the appropriate Federal and State officials, and developed in consultation with the HOLDER. The terms of such Memorandum of Agreement, except as otherwise mandated by law, shall not compel a change in the basic nature and general route of the approved transportation system or otherwise prevent or impair in any significant respect the expeditious construction and initial OPERATION of the transportation system.

1.13. Completion of Use

1.13.1. Upon completion of the use of all or any portion of the RIGHT-OF-WAY or other portion of the PIPELINE SYSTEM authorized under this GRANT, HOLDER shall promptly remove all improvements and equipment, except as otherwise approved by the AUTHORIZED OFFICER, and restore the land to a condition that is satisfactory to the AUTHORIZED OFFICER. The satisfaction of the AUTHORIZED OFFICER shall be stated in writing. Where approved in writing by the AUTHORIZED OFFICER, buried pipe may be left in place, provided HOLDER has shown to the satisfaction of the AUTHORIZED OFFICER that hydrocarbons and residues have been removed from the pipe and the ends have been suitably capped.

1.13.2. All areas utilized pursuant to authorizations issued in connection with the PIPELINE that do not constitute a part of the RIGHT-OF-WAY or are not otherwise required for PIPELINE SYSTEM OPERATIONS shall be restored by the HOLDER upon completion of use unless otherwise directed in writing by the AUTHORIZED OFFICER. HOLDER'S RESTORATION plans shall be approved in writing by the AUTHORIZED OFFICER in accordance with STIPULATION 2.12.

1.14. Public and Private Improvements

1.14.1. HOLDER shall provide reasonable protection to existing public or private improvements which may be adversely affected by its activities or those of its agents, employees, contractors ~~(including subcontractors) and the employees of each of them~~ during construction, OPERATION and termination of the PIPELINE SYSTEM. This protection shall specifically be provided to the TRANS-ALASKA PIPELINE SYSTEM and the ALASKA NATURAL GAS TRANSPORTATION SYSTEM on FEDERAL LANDS. If it is determined that the HOLDER has caused damage to such public and private improvements, and if the owner so requires, then the HOLDER shall promptly repair, or reimburse the owner for reasonable costs in repairing the property to a condition which is satisfactory to the owner, but need not exceed its condition prior to damage.

1.15. Regulation of Public Access

1.15.1. During construction or termination activities, HOLDER may regulate or prohibit public access to or upon any ACCESS ROAD being used for such activity. At all other times, HOLDER shall permit free and unrestricted public access to and upon ACCESS ROADS, except that with the written consent of the AUTHORIZED OFFICER, HOLDER may regulate or prohibit public access and vehicular traffic on ACCESS ROADS as required to facilitate operations or to protect the public, wildlife and livestock from hazards associated with the OPERATION of the PIPELINE SYSTEM. HOLDER shall provide appropriate warnings, flagmen, barricades and other safety measures when HOLDER is using ACCESS ROADS or regulating or prohibiting public access to or upon ACCESS ROADS.

1.15.2. During construction of the PIPELINE, the HOLDER shall provide alternative routes for existing roads and trails at locations and to standards as determined by the AUTHORIZED OFFICER, whether or not these roads or trails are recorded.

1.15.3. The HOLDER shall make provisions for suitable permanent crossings for the public at locations and to standards approved in writing by the AUTHORIZED OFFICER where the right-of-way crosses existing roads, foot-trails, winter trails, or other existing rights-of-way, including those validly established pursuant to 43 U.S.C. 932 prior to October 21, 1976.

1.15.4. After completion of construction of the PIPELINE SYSTEM, the AUTHORIZED OFFICER may designate areas of the RIGHT-OF-WAY to which the public shall have free and unrestricted access after consultation with HOLDER. As directed by the AUTHORIZED OFFICER, HOLDER shall post, gate, fence or otherwise restrict public access.

1.16. Electronically Operated Devices

1.16.1. The HOLDER shall, as necessary, screen, filter, or otherwise suppress any electronically operated devices installed ~~as part of the PIPELINE SYSTEM which are capable of producing~~ electromagnetic interference radiations so that such devices will not adversely affect the functioning of existing communications systems, including supervisory control systems used in connection with the operation of the TRANS-ALASKA PIPELINE SYSTEM and the ALASKA NATURAL GAS TRANSPORTATION SYSTEM, or navigational aids. In the event that structures such as towers or buildings are to be erected as parts of the PIPELINE SYSTEM, their positioning shall be such that they will not obstruct radiation patterns of existing line-of-sight communications systems, navigational aids, or similar systems. The HOLDER shall furnish a report and calculations showing the expected signal levels to the AUTHORIZED OFFICER.

1.17. Hunting, Fishing and Trapping

1.17.1. Holder shall inform its employees, agents, contractors, subcontractors and their employees of the applicable laws and regulations relating to hunting, fishing, trapping, feeding and harassment of wildlife.

1.18. Small Craft Passage

1.18.1. The creation of any permanent obstruction to the passage of small craft in streams is prohibited.

1.19. Protection of Survey Monuments

1.19.1. The HOLDER shall mark and protect all survey monuments encountered during construction, OPERATION and termination of the PIPELINE SYSTEM. These monuments are not to be disturbed; however, if disturbance of a monument or any of its accessories becomes necessary, the HOLDER will notify the AUTHORIZED OFFICER in writing before such disturbance occurs, and the AUTHORIZED OFFICER will provide instructions. A written report to the AUTHORIZED OFFICER will also be made immediately by the HOLDER in the event that any monuments or accessories are inadvertently damaged.

1.19.2. If any public land survey monuments, corners, or accessories (excluding geodetic survey monuments) of the United States or survey monuments of others, are destroyed or damaged during the construction, OPERATION or termination of the PIPELINE SYSTEM, the HOLDER shall employ a qualified land surveyor to reestablish or restore same in accordance with the "Manual of Instructions for the Survey of Public Lands" of the Bureau of Land Management and shall record such survey in the appropriate records. Additional requirements for the protection of monuments, corners, and bearing trees on FEDERAL LANDS may be prescribed by the AUTHORIZED OFFICER.

1.20. Fire Prevention and Suppression

1.20.1. HOLDER shall do everything reasonably within HOLDER'S power, both independently and upon request of the AUTHORIZED OFFICER, to prevent and suppress fires on or near the PIPELINE SYSTEM. This includes making available such construction and maintenance forces as may be reasonably obtained for the suppression of fires [Source - 43 CFR Subpart 2881.2(5)].

1.20.2. HOLDER shall promptly notify the AUTHORIZED OFFICER and the owners of the TRANS-ALASKA PIPELINE SYSTEM and the ALASKA NATURAL GAS TRANSPORTATION SYSTEM of any fires on, or which may threaten any portion of HOLDER'S PIPELINE SYSTEM, the TRANS-ALASKA PIPELINE SYSTEM or the ALASKA NATURAL GAS TRANSPORTATION SYSTEM.

1.20.3. Use of open fires in connection with construction, OPERATION and termination of the PIPELINE SYSTEM is prohibited on FEDERAL LANDS unless authorized in writing by the AUTHORIZED OFFICER.

1.21. Surveillance and Maintenance

1.21.1. During the construction, OPERATION and termination phases of the PIPELINE SYSTEM, the HOLDER shall conduct a surveillance and maintenance program applicable to the subarctic and arctic environment. At minimum, this program shall, with respect to the HOLDER'S activities, be designed to:

- A. protect public health and safety;
- B. protect natural resources;
- C. control erosion;
- D. maintain PIPELINE integrity;
- E. protect public and private property; and

F. prevent damage to the TRANS-ALASKA PIPELINE SYSTEM or the ALASKA NATURAL GAS TRANSPORTATION SYSTEM from the HOLDER'S activities including the activities of its employees, agents, contractors (including subcontractors) and the employees of each of them, in connection with the PIPELINE.

1.21.2. The HOLDER shall provide a communications capability that ensures the transmission of information required for the safe construction, OPERATION and termination of the PIPELINE SYSTEM.

1.21.3. The HOLDER shall maintain complete and up-to-date records on construction, OPERATION and termination activities performed in connection with the PIPELINE SYSTEM. Such records shall include surveillance data, leak and failure records, necessary operational data, modification records, and such other data as may be required by 49 CFR, Parts 191 and 192, and other applicable Federal laws and regulations.

1.21.4. The HOLDER shall provide, as necessary, and maintain ACCESS ROADS and airstrips, the number, location and standards of which shall be approved by the AUTHORIZED OFFICER, to provide for continuing maintenance and surveillance of the PIPELINE SYSTEM.

1.22. Quarters, Transportation and Communications

1.22.1. HOLDER shall furnish, on a reimbursable basis and to the satisfaction of the AUTHORIZED OFFICER, such representatives of the United States involved in surveillance of the PIPELINE SYSTEM

as may be designated by the AUTHORIZED OFFICER with: adequate meals, living quarters, and office space, reasonable use of HOLDER'S communication systems; and with reasonable use of HOLDER'S surface and air transportation during the construction, OPERATION and termination of the PIPELINE SYSTEM. Whenever possible, the AUTHORIZED OFFICER will issue advance written notification to HOLDER with regard to the number of PERSONS for whom such services and facilities will be required.

1.23. Health and Safety

1.23.1. HOLDER shall take measures necessary to protect the health and safety of all PERSONS directly affected by activities performed in connection with the construction, OPERATION or termination of the PIPELINE SYSTEM and shall immediately abate any health or safety hazards. HOLDER shall promptly notify the AUTHORIZED OFFICER of all serious accidents which occur in connection with PIPELINE SYSTEM activities.

1.24. Conduct of OPERATIONS

1.24.1. HOLDER shall perform all PIPELINE SYSTEM OPERATIONS in a safe and workmanlike manner so as to ensure protection of the environment and the safety and integrity of the PIPELINE SYSTEM, and shall at all times employ and maintain personnel and equipment sufficient for that purpose. HOLDER shall immediately notify the AUTHORIZED OFFICER of any condition, problem, malfunction, or other occurrence which in any way threatens the integrity of the PIPELINE SYSTEM or may cause SIGNIFICANT DAMAGE to the environment.

1.24.2. HOLDER shall take all reasonable precautions to protect the TRANS-ALASKA PIPELINE SYSTEM and the ALASKA NATURAL GAS TRANSPORTATION SYSTEM from damage caused by HOLDER during construction, OPERATION or termination of the PIPELINE SYSTEM. Holder shall promptly notify the AUTHORIZED OFFICER and the owners or agents of the TRANS-ALASKA PIPELINE SYSTEM and the ALASKA NATURAL GAS TRANSPORTATION SYSTEM of any such condition, problem, malfunction or other occurrence which may in any way threaten the integrity of the TRANS-ALASKA PIPELINE SYSTEM or the ALASKA NATURAL GAS TRANSPORTATION SYSTEM.

1.25. Applicability of STIPULATIONS

1.25.1. Nothing in these STIPULATIONS shall be construed as applying to activities of HOLDER that have no relation to the PIPELINE SYSTEM.

1.25.2. Nothing in these STIPULATIONS shall be construed to affect any right or cause of action that otherwise would be available to HOLDER against any PERSON other than the United States.

2. ENVIRONMENTAL

2.1. Environmental Briefing

2.1.1 The HOLDER shall develop and provide environmental briefings for supervisory and field personnel directly related to the project and for Federal field representatives in accordance with the approved environmental briefings plan required by STIPULATION 1.7.2.

2.2. Pollution Control

2.2.1. General

2.2.1.1. HOLDER shall ensure that degradation of air, land and water quality is minimized or avoided when conducting PRE-CONSTRUCTION, construction, OPERATION and termination activities related to the PIPELINE SYSTEM. HOLDER shall comply with applicable State of Alaska air and water quality standards, as approved by the Environmental Protection Agency and with the requirements of the Environmental Protection Agency's National Pollutants Discharge Elimination System discharge permit program, and all other Federal and State laws and regulations relating to pollution control or prevention, in accordance with the approved environmental plans required by STIPULATION 1.7.2.

2.2.2. Air and Water Pollution

2.2.2.1. The HOLDER shall utilize and operate all facilities and devices used in connection with the PIPELINE SYSTEM so as to avoid or minimize ice fog. Facilities and devices which cannot be prevented from producing ice fog shall be located so as to minimize interference with airfields, communities or roads.

2.2.2.2. All Activities employing wheeled or tracked vehicles or other equipment are prohibited in lakes, WETLANDS, streams or rivers unless such activity is approved in writing by the AUTHORIZED OFFICER.

~~2.2.2.3. Natural ground temperature or natural surface water/groundwater temperature shall not be changed significantly by the PIPELINE SYSTEM or by any construction related activity unless approved in writing by the AUTHORIZED OFFICER.~~

2.2.2.4. The HOLDER shall comply with thermal pollution standards pursuant to State of Alaska water quality standards as approved by the Environmental Protection Agency.

2.2.3. Pesticides, Herbicides and Other Chemicals

2.2.3.1. Where possible, the HOLDER shall use nonpersistent and immobile types of pesticides, herbicides and other chemicals. Only those pesticides and herbicides currently registered by the Environmental Protection Agency pursuant to the Federal Insecticide, Fungicide and Rodenticide Act shall be applied. Applications of pesticides and herbicides shall be in accordance with label directions approved by the Environmental Protection Agency. Each Chemical to be used and its application constraints shall be approved in writing by the AUTHORIZED OFFICER prior to use.

2.2.4. Waste Disposal

2.2.4.1. All WASTE generated in construction, OPERATION and termination of the PIPELINE SYSTEM shall be removed or other wise disposed of in a manner acceptable to the AUTHORIZED OFFICER. All applicable Federal and State requirements will be incorporated in the plans required in STIPULATION 1.7.2.

2.3. Buffer Strips

2.3.1. Public Interest Areas

2.3.1.1. No construction activity in connection with the PIPELINE SYSTEM shall be conducted within one-half (1/2) mile of any officially designated Federal, State, Borough or Municipal park, wildlife refuge, wildlife range, critical habitat area, game sanctuary, research natural area, recreation area or site, wilderness area, wild and/or scenic river or any registered National Historic Site, National Landmark or Natural Landmark unless such activity is approved in writing by the AUTHORIZED OFFICER.

2.3.2. Vegetative Screen

2.3.2.1. Where the PIPELINE right-of-way crosses public highways, ~~and other roads designated by the AUTHORIZED OFFICER, the PIPELINE~~ shall be clearly marked as required in 49 CFR 192.707 and a screen of vegetation native to the adjacent areas shall be established over disturbed areas unless otherwise approved in writing by the AUTHORIZED OFFICER.

2.3.2.2. The PIPELINE SYSTEM shall be located so as to provide buffer strips of undisturbed land at least 500 feet wide between the PIPELINE SYSTEM and streams and lakes, unless otherwise approved in writing by the AUTHORIZED OFFICER.

2.3.2.3. Undisturbed buffer strips at least 500 feet wide will be maintained between material sites and public highways unless otherwise approved in writing by the AUTHORIZED OFFICER.

2.4. Erosion and Sedimentation Control

2.4.1. General

2.4.1.1. HOLDER shall perform all PIPELINE SYSTEM activities so as to minimize disturbance to all surface areas.

2.4.1.2. The design of the PIPELINE SYSTEM shall provide for the control of erosion, and sediment production, transport and deposit in accordance with the approved erosion and sedimentation control plan required in STIPULATION 1.7.2.

2.4.1.3. Erosion control measures, including the use of erosion control structures, if necessary, shall be implemented in accordance with the plans approved under STIPULATION 1.7.2. to limit induced and accelerated erosion, limit sediment production and transport and lessen the possibility of forming new drainage channels. The design of such measures shall be based on the rainfall rate and snowmelt combination characteristic of the region, the effects of thawing produced by flowing or ponded water on permafrost and the effects of ice. Permanent erosion control structures shall be designed to accommodate a 50-year flood.

2.4.1.4. Surface materials suitable for use in restoration that are taken from disturbed areas shall be stockpiled and utilized during restoration unless otherwise approved in writing by the AUTHORIZED OFFICER. Erosion and sediment control practices to be utilized shall be determined by the needs of specific sites and, as appropriate, shall include but not be limited to REVEGETATION, mulching, and placement of mat binders, soil binders, rock or gravel blankets or structures.

2.4.2. Crossing of WETLANDS, Streams, Rivers or Floodplains

2.4.2.1. ~~HOLDER shall minimize the number of WETLAND, stream, river or floodplain crossings as a PIPELINE SYSTEM design criterion in accordance with the approved WETLAND, stream, river, or floodplain crossing plan required in STIPULATION 1.7.2.~~

2.4.2.2. HOLDER shall minimize erosion and sedimentation at and downstream from all stream, river and WETLANDS crossings and those parts of the PIPELINE SYSTEM within flood-plains as provided in STIPULATION 3.8.

2.4.2.3. Temporary access over streambanks prior to and following trenching shall be made through use of fill ramps rather than by cutting through streambanks, unless otherwise approved in writing

by the AUTHORIZED OFFICER. HOLDER shall remove such ramps upon termination of seasonal or final use. Ramp materials shall be disposed of in a manner approved in writing by the AUTHORIZED OFFICER.

2.4.2.4. HOLDER shall plan the timing and location of WETLAND, stream, river or floodplain crossings during design of the PIPELINE SYSTEM to minimize impacts to fish and wildlife populations, habitats and uses.

2.4.3. Excavated Material

2.4.3.1. Excavated material in excess of that required to back fill around any structure, including the pipe, or unsuitable for back fill or restoration purposes, shall be disposed of in accordance with the approved overburden and excess material disposal plan required in STIPULATION 1.7.2.

2.4.3.2. Excavated materials shall not be stockpiled in rivers, streams or flood-plains, or on ice unless approved in writing by the AUTHORIZED OFFICER. In WETLANDS stockpiling shall be in accordance with the plan required by STIPULATION 1.7.2.

2.5. Fish and Wildlife Protection

2.5.1. Fish

2.5.1.1. During PRE-CONSTRUCTION, construction, OPERATION and termination of the PIPELINE SYSTEM, the HOLDER shall ensure that there exists free passage and movement of fish in streams designated by the AUTHORIZED OFFICER. Temporary blockages of fish necessitated by instream activities may be approved. Construction planning required by the detailed network analysis diagrams in STIPULATION 1.8. and NOTICE-TO-PROCEED application as provided in STIPULATION 1.10. shall include the time and place that such temporary blockages may occur.

2.5.1.2. Pump intakes shall be screened to prevent harm to fish. Screening specifications shall be approved by the AUTHORIZED OFFICER.

2.5.1.3. When abandoned, water diversion structures shall be removed or plugged and stabilized, unless otherwise approved in writing by the AUTHORIZED OFFICER.

2.5.1.4. HOLDER shall avoid disturbances to those FISH SPAWNING BEDS, FISH REARING AREAS and FISH OVERWINTERING AREAS designated by the AUTHORIZED OFFICER. However, where disturbances cannot be avoided, proposed modifications and appropriate mitigation measures shall be designed by HOLDER and approved in writing by the AUTHORIZED OFFICER.

2.5.1.5. HOLDER shall protect FISH SPAWNING BEDS, FISH REARING AREAS, and FISH OVERWINTERING AREAS from sediment where soil material is expected to be suspended in water as a result of construction activities. Settling basins or other sediment control structures shall be constructed and maintained to intercept such sediment before it reaches rivers, streams, lakes or WETLANDS.

2.5.1.6. HOLDER shall comply with any site-specific terms and conditions imposed by the AUTHORIZED OFFICER to protect FISH SPAWNING BEDS, FISH REARING AREAS, and FISH OVERWINTERING AREAS from the effects of HOLDER'S activities. If material sites are approved adjacent to or in lakes, rivers, streams, WETLANDS, or flood-plains the AUTHORIZED OFFICER may require HOLDER to construct levees or berms or employ other suitable means to protect fish and fish passage and to prevent or minimize sedimentation. HOLDER shall repair damage to such areas caused by construction, OPERATION or termination of the PIPELINE SYSTEM to the satisfaction of the AUTHORIZED OFFICER as stated in writing.

2.5.1.7. HOLDER shall not take water from FISH SPAWNING BEDS, FISH REARING AREAS, and FISH OVERWINTERING AREAS or waters that directly replenish those areas during critical periods that will be defined by the AUTHORIZED OFFICER, unless otherwise approved by the AUTHORIZED OFFICER.

2.5.2. Big Game Movements

2.5.2.1. HOLDER shall design, construct and maintain both the buried and above ground sections of the PIPELINE so as to assure free passage and movement of big game animals.

2.5.3. Zones of Restricted Activities

2.5.3.1. Activities of HOLDER in connection with construction, OPERATION and termination of the PIPELINE SYSTEM in key fish and wildlife areas and in specific areas where threatened or endangered species of animals are found may be restricted by the AUTHORIZED OFFICER during periods of fish and wildlife breeding, nesting, spawning, lambing and calving activity, overwintering, and during major migrations of fish and wildlife. The AUTHORIZED OFFICER shall provide HOLDER written notice of such restrictive action. At least annually and as far in advance of such restrictions as is possible, the AUTHORIZED OFFICER shall furnish HOLDER an updated list of those areas where such actions may be required, together with anticipated dates of restriction.

2.6. Mineral Material Sites

2.6.1. If HOLDER requires mineral materials from FEDERAL LANDS, HOLDER shall make application to purchase such mineral materials in accordance with 43 CFR Part 3610 and the material exploration

and extraction plan required in STIPULATION 1.7.2. HOLDER shall submit a mining plan in accordance with the requirements of the AUTHORIZED OFFICER. No mineral materials may be removed without the written approval of the AUTHORIZED OFFICER.

2.6.2. Mineral materials site boundaries shall be shaped in such a manner as to blend with the surrounding natural land patterns. Regardless of the layout of material sites, primary emphasis shall be placed on prevention of soil erosion and damage to vegetation, and destruction of fish and wildlife habitat.

2.7. Clearing

2.7.1. Boundaries

2.7.1.1. HOLDER shall identify clearing boundaries on the ground which shall be approved by the AUTHORIZED OFFICER prior to beginning clearing operations. All timber and other vegetative material outside clearing boundaries and all blazed, painted or posted trees which are on or mark clearing boundaries are reserved from cutting and removal with the exception of danger trees or snags designated by HOLDER and approved by the AUTHORIZED OFFICER.

2.7.2. Timber

2.7.2.1. Prior to initiating clearing operations, HOLDER shall notify the AUTHORIZED OFFICER in writing of the location of merchantable timber, if any, which will be cut, removed or destroyed in the construction, OPERATION or termination of the PIPELINE and shall pay the United States in advance of removal activity, such sum of money as the AUTHORIZED OFFICER determines to be the full stumpage value of the timber to be cut, removed or destroyed.

2.7.2.2. All trees, snags and other wood material cut in connection with clearing operations shall be cut so that the resulting stumps shall not be higher than six (6) inches measured from the ground on the uphill side.

2.7.2.3. All trees, snags and other wood materials cut in connection with clearing operations shall be felled into the area within the clearing boundaries and away from watercourses.

2.7.2.4. Hand clearing shall be used in areas where the AUTHORIZED OFFICER determines that use of heavy equipment would be detrimental to existing conditions.

2.7.2.5. All debris resulting from clearing operations that may block stream flow, delay or block fish passage, contribute to flood damage or result in stream bed scour or erosion shall be removed within 48 hours unless otherwise approved or directed by the AUTHORIZED OFFICER.

2.7.2.6. Logs shall not be skidded or yarded across any stream without the written approval of the AUTHORIZED OFFICER.

2.7.2.7. No log landing shall be located within five hundred (500) feet of any watercourse unless otherwise approved in writing by the AUTHORIZED OFFICER.

2.7.2.8. To prevent the spreading of spruce bark beetles, all spruce slash shall be disposed of prior to the start of the thaw season following the cutting of the slash and to the satisfaction of the AUTHORIZED OFFICER.

2.7.2.9. Disposal of vegetation, nonmerchantable timber, overburden and other materials removed during clearing operations shall be addressed in the plans required in STIPULATION 1.7.2. and approved in writing by the AUTHORIZED OFFICER.

2.8. Disturbance or Use of Natural Water

2.8.1. All activities of HOLDER in connection with the PIPELINE SYSTEM that may create new lakes, drain existing lakes, significantly divert natural drainages and surface runoff, permanently alter stream or groundwater hydrology or disturb significant areas of stream beds are prohibited unless such activities along with necessary mitigative measures are approved in writing by the AUTHORIZED OFFICER.

2.8.2. The HOLDER shall not develop or utilize any wells or surface water sources on FEDERAL LANDS for the construction, OPERATION or termination of the PIPELINE SYSTEM without the prior written approval of the AUTHORIZED OFFICER and in compliance with A.S. 46.15.

2.9. Off RIGHT-OF-WAY Traffic

2.9.1. The HOLDER shall not operate mobile ground equipment on FEDERAL LANDS off the right-of-way, any roads, or authorized areas unless approved in writing by the AUTHORIZED OFFICER or when necessary to prevent immediate harm to any person or property.

2.10. Visual Resources

2.10.1. The HOLDER shall assess the visual impacts of the PIPELINE SYSTEM and shall provide mitigative measures that ameliorate those identified impacts in planning all construction, OPERATION and termination activities of the PIPELINE SYSTEM. The HOLDER shall submit a visual impact plan for the PIPELINE SYSTEM in accordance with STIPULATION 1.7.2.

2.11. Use of Explosives

2.11.1. HOLDER shall submit a plan for storage and use of explosives, including but not limited to blasting techniques, to the AUTHORIZED OFFICER for approval in accordance with STIPULATION 1.7.2.

2.11.2. No blasting shall be conducted in streams, rivers or lakes, or within one quarter (1/4) mile of identified fish or wildlife resources without written approval of the AUTHORIZED OFFICER.

2.11.3. Timing and location of blasting shall be approved by the AUTHORIZED OFFICER.

2.12. RESTORATION

2.12.1. Upon completion of use, HOLDER shall RESTORE all areas of FEDERAL LANDS disturbed by it, in accordance with schedules approved by the AUTHORIZED OFFICER and approved plans required under STIPULATION 1.7.2. RESTORATION performed by HOLDER shall be approved in writing by the AUTHORIZED OFFICER. Unless otherwise directed by the AUTHORIZED OFFICER, all disturbed areas of FEDERAL LANDS shall be left in such stabilized condition that erosion will be minimized through such means as adequately designed and constructed waterbars, REVEGETATION and chemical surface control; culverts and bridges shall be removed; and slopes shall be RESTORED by HOLDER in a manner satisfactory to the AUTHORIZED OFFICER.

2.12.2. REVEGETATION of disturbed areas of FEDERAL LANDS shall be accomplished as soon as practicable in accordance with plans and schedules required under STIPULATION 1.7.2. The results of REVEGETATION must be satisfactory to the AUTHORIZED OFFICER as stated in writing.

2.12.3. HOLDER shall dispose of all materials from ACCESS ROADS, haul ramps, berms, dikes, and other earthen structures it has placed on FEDERAL LANDS, in accordance with approved RESTORATION plans unless otherwise directed by the AUTHORIZED OFFICER.

2.12.4. Pending RESTORATION of a disturbed area of FEDERAL LANDS, HOLDER shall maintain the area in a stabilized condition satisfactory to the AUTHORIZED OFFICER.

2.12.5. Upon completion of RESTORATION of an area of FEDERAL LANDS, HOLDER shall remove all equipment and supplies from that area in accordance with approved RESTORATION plans unless otherwise directed by the AUTHORIZED OFFICER.

2.12.6. HOLDER shall maintain all restored areas of FEDERAL LANDS in accordance with approved plans required under STIPULATION 1.7.2.

2.13. Reporting, Prevention, Control, Cleanup and Disposal of OIL, GAS and HAZARDOUS SUBSTANCE Discharges

2.13.1. HOLDER shall give notice in accordance with applicable law of any spill, leakage, or discharge of OIL, GAS or other HAZARDOUS SUBSTANCES in connection with the construction, OPERATION or termination of the PIPELINE SYSTEM to:

A. the AUTHORIZED OFFICER; and

B. such other Federal and State officials as are required by law to be given such notice.

Any oral notice shall be confirmed in writing within 24 hours. HOLDER may group small spills on FEDERAL LANDS in accordance with State of Alaska Department of Environmental Conservation requirements and report them to the AUTHORIZED OFFICER on a weekly basis.

2.13.2. HOLDER shall submit an OIL and HAZARDOUS SUBSTANCE control, cleanup and disposal plan to the AUTHORIZED OFFICER in accordance with STIPULATION 1.7.2; and where applicable, in accordance with 40 CFR, Part 112. The plan shall conform to this STIPULATION and shall outline all areas where OIL and/or HAZARDOUS SUBSTANCES are stored, utilized, transported or distributed. The plan shall address fuel distribution systems, storage and containment, containerized products, leak detection systems, handling procedures, training programs, provisions for collection, storage and ultimate disposal of waste oil, cleanup methods, and disposal sites. The plan shall be approved in writing by the AUTHORIZED OFFICER and HOLDER shall demonstrate its capability and readiness to execute the plan to the satisfaction of the AUTHORIZED OFFICER.

2.14. PIPELINE Contingency Plan

2.14.1. HOLDER shall submit a PIPELINE contingency plan to the AUTHORIZED OFFICER. The plan shall conform to the requirements of 49 CFR, Sections 192.605 and 192.615 and shall outline the steps to be taken in the event of a failure, leak or explosion in the PIPELINE. The plan shall be approved in writing by the AUTHORIZED OFFICER prior to PIPELINE startup and HOLDER shall demonstrate its capability and readiness to execute the plan to the satisfaction of the AUTHORIZED OFFICER.

2.14.2. The HOLDER shall, as appropriate, update the plan and methods of implementation thereof, which shall be submitted annually to the AUTHORIZED OFFICER.

3. TECHNICAL

3.1. PIPELINE SYSTEM Standards

3.1.1. All design, material, construction, inspection, initial testing, OPERATION and termination practices employed in the PIPELINE and RELATED FACILITIES shall be in accordance with safe and proven engineering practice and shall meet or exceed the following standards:

A. U.S. Department of Transportation regulations, 49 CFR Part 192, "Transportation of Natural and Other Gas by Pipeline: Minimum Federal Safety Standards";

B. American National Standards Institute Code B 31.8 Gas Transmission and Distribution Piping Systems; and

C. ASME Gas Piping Standard Committee, latest edition: "Guide for GAS Transmission and Distribution Piping System";

D. U.S. Department of Transportation regulations, 49 CFR Part 191, "Transportation of Natural and Other Gas by Pipeline; Annual Reports and Incident Reports";

E. U.S. Department of Transportation regulations, 49 CFR Part 193, "Liquefied Natural Gas Facilities: Federal Safety Standards".

3.1.2. Requirements in addition to those set forth in the above minimum standards may be imposed by the AUTHORIZED OFFICER as necessary to reflect the impact of arctic and subarctic environments. If any standard contains a provision which is inconsistent with a provision in another standard, the more stringent standard shall apply. The AUTHORIZED OFFICER shall make every effort to identify such additional requirements during the design phase.

3.2. Special Standards

3.2.1. The PIPELINE design for construction in environmentally sensitive areas designated by the AUTHORIZED OFFICER, shall provide for minimum maintenance needs to reduce reentry requirements.

3.2.2. All practicable means shall be utilized to avoid undue and unnecessary degradation to the ground organic layer.

3.2.3. PIPELINE design shall include special design to avoid or limit pipe crack propagation.

3.2.4. The HOLDER shall inspect 100 percent where practicable but not less than 90 percent of the main line girth welds using radiographic or other nondestructive inspection techniques to assure compliance with the defect acceptability standards in 49 CFR Part 192. Where radiography is used, x-ray radiography will be used, unless otherwise approved by the AUTHORIZED OFFICER.

3.2.5. Welder qualification tests shall be by destructive means, in accordance with Section 3 of API 1104, except that operators of automatic welding equipment may be qualified by radiography. Welder qualification tests for station piping facilities may alternately be in accordance with ASME Boiler and Pressure Vessel Code, Section 9.

3.2.6. The PIPELINE design shall provide for sectionalizing block valves, protective devices to prevent overpressuring, and other safety devices installed at locations required by 49 CFR Part 192, or as may be designated by the AUTHORIZED OFFICER during the DESIGN CRITERIA reviews to accommodate potentially hazardous areas, other facilities, and environmental values.

3.2.7. The PIPELINE shall be separated by 200 feet or more from facilities of the TRANS-ALASKA PIPELINE SYSTEM and the ALASKA NATURAL GAS TRANSPORTATION SYSTEM (except ACCESS ROADS, airfields, or other facilities which are not either OIL or GAS containing or civil works or structures which protect or physically support OIL or GAS containing facilities). The AUTHORIZED OFFICER will designate the points on the facilities from which the 200 feet shall be measured. Separations of less than 200 feet requested by the HOLDER may be approved by the AUTHORIZED OFFICER at crossing of the TRANS-ALASKA PIPELINE SYSTEM and the ALASKA NATURAL GAS TRANSPORTATION SYSTEM and at other locations agreed upon by the respective owners of the TRANS-ALASKA PIPELINE SYSTEM and the ALASKA NATURAL GAS TRANSPORTATION SYSTEM and the HOLDER. At other locations where required to avoid environmental damage or terrain constraints, requests by HOLDER for separation of less than 200 feet may be approved by the AUTHORIZED OFFICER, provided that the AUTHORIZED OFFICER has first determined that the following criteria have been met:

A. stability of foundation and other earth materials will be protected and maintained;

B. the integrity of the PIPELINE will be reasonably protected and maintained;

C. SIGNIFICANT DAMAGE to the environment (including but not limited to fish and wildlife populations and/or their habitats) will not be caused;

D. hazards to public health and safety will not be created;

E. the TRANS-ALASKA PIPELINE SYSTEM and the ALASKA NATURAL GAS TRANSPORTATION SYSTEM will be reasonably protected from adverse affects of the HOLDER'S activities including the activities of its agents, employees, and contractors (including subcontractors), and the employees of each of them; and

F. provided that in no case will reducing the cost of construction be the sole consideration upon which such approval is based.

3.2.8. HOLDER shall provide a quality control system to assure compliance with approved plans, specifications, procedures, this GRANT, and these STIPULATIONS.

3.3. Standards for ACCESS ROADS

3.3.1. Design, materials, and construction and maintenance practices employed for ACCESS ROADS shall be in accordance with safe and proven engineering practices and in accordance with the principles of construction for secondary roads for the arctic and subarctic environments, and in accordance with STIPULATION 1.8.2.

3.3.2. HOLDER shall submit a layout of each proposed ACCESS ROAD for approval by the AUTHORIZED OFFICER in connection with any use authorization application.

3.3.3. ACCESS ROADS shall be constructed to widths suitable for safe operation of equipment at the travel speeds proposed by HOLDER.

3.3.4. The maximum allowable grade for ACCESS ROADS shall be twelve (12) percent unless otherwise approved in writing by the AUTHORIZED OFFICER.

3.3.5. To provide lateral drainage, non-paved road surfaces shall be crowned and windrows of surface material shall not be left on the road edges.

3.4. CONSTRUCTION MODE Requirements

3.4.1. The selection of the CONSTRUCTION MODE shall be governed by the results of adequate geotechnical field exploration and testing programs. Comprehensive analyses shall be made to assure that PIPELINE integrity will be maintained and that construction or OPERATION of the PIPELINE will not cause or exacerbate major terrain disturbances. Analysis shall consider stresses and strains on the PIPELINE by internal and external loading and shall include, but not be limited to, total and differential heaving, permafrost (especially liquefaction and differential settlement

after thawing), frost action, seismic loading, slope stability, active faults, swelling soils, subsidence, erosion, flooding, icings, and differential temperature stress. The FINAL DESIGN for the CONSTRUCTION MODE shall be submitted to the AUTHORIZED OFFICER for written approval in accordance with STIPULATION 1.11.

3.5. Earthquakes and Fault Displacements

3.5.1. Earthquakes

3.5.1.1. The PIPELINE SYSTEM shall be designed by appropriate application of modern, state-of-the-art seismic design procedures to protect the PIPELINE SYSTEM from the effects (including seismic shaking, ground deformation, and earthquake-induced mass movements) of earthquakes distributed along its route.

3.5.1.2. HOLDER shall provide a seismic monitoring system, to be approved in writing by the AUTHORIZED OFFICER, and shall ensure there are adequate procedures for the safe shutdown of the PIPELINE SYSTEM under seismic conditions that may affect PIPELINE SYSTEM integrity. Such procedures, to be considered adequate, shall include but not necessarily be limited to:

A. communication capability with all key operating control points on the PIPELINE SYSTEM, the GAS processing plant, the terminal including the Liquefied Natural Gas Plant, and other parties with seismic monitoring capabilities, as appropriate;

B. a control center for the PIPELINE SYSTEM;

C. operating procedures establishing the actions to be taken in the event of seismic conditions that may affect PIPELINE SYSTEM integrity; and

D. seismic sensors as necessary to supplement existing monitoring capabilities.

3.5.2. Fault Displacements

3.5.2.1. Prior to applying for any NOTICE TO PROCEED, HOLDER shall satisfy the AUTHORIZED OFFICER that all recognizable or reasonably inferred active faults or fault zones along the alignment have been identified and delineated and any risk of major PIPELINE SYSTEM damage resulting from fault movement and ground deformation has been adequately assessed and provided for in the design of the PIPELINE SYSTEM in accordance with the approved geologic hazards plan required by STIPULATION 1.7.2. Evaluation of said risk shall be based on geologic, geomorphic, geodetic, seismic, and other appropriate scientific evidence of past or present fault behavior and shall be compatible with the design earthquakes and with observed relationships between earthquake magnitude and extent and amount of deformation and fault slip within the fault zone.

3.5.2.2. Minimum DESIGN CRITERIA as required by STIPULATION 1.7.2. for any portion of the PIPELINE SYSTEM traversing a fault zone that is interpreted by the AUTHORIZED OFFICER as active shall be:

A. that the PIPELINE SYSTEM resist failure resulting in line rupture from maximum anticipated horizontal and/or vertical displacement in the foundation material anywhere within the fault zone during the life of the PIPELINE SYSTEM; and

B. that no storage tank or compressor station be located within the fault zone unless otherwise approved by the AUTHORIZED OFFICER.

3.6. Slope Stability

3.6.1. Areas subject to mudflows, landslides, avalanches, rock falls, and other types of mass movements shall be avoided where practicable in locating the PIPELINE SYSTEM. Where such avoidance is not practicable, the PIPELINE SYSTEM design, based upon detailed field investigations and analysis, shall provide measures to prevent the occurrence of, or protect the PIPELINE SYSTEM against the effects of mass movements. The PIPELINE shall be designed to protect existing facilities, including the TRANS-ALASKA PIPELINE SYSTEM and the ALASKA NATURAL GAS TRANSPORTATION SYSTEM, from the effects of mass movement caused by HOLDER'S activities (including the activities of HOLDER'S employees, agents, contractors, and subcontractors, and the employees of each of them) and shall not adversely affect slope stability protection measures of existing structures.

3.7. WETLANDS, River, Stream and Floodplain Crossings and Erosion

3.7.1. General

3.7.1.1. The PIPELINE SYSTEM shall be designed so as to minimize the number of WETLAND, river, stream and flood plain crossings and to include, but not be limited to, consideration of aufeis development, erosion and sedimentation, restriction of natural meander or alteration of the physical or chemical nature of the waterbody as well as the effect of any alteration in these factors caused by HOLDER'S activities or the activities of its agents, employees, contractors, or subcontractors, and the employees of each of them upon the existing facilities of the TRANS-ALASKA PIPELINE SYSTEM and the ALASKA NATURAL GAS TRANSPORTATION SYSTEM.

3.7.1.2. The PIPELINE SYSTEM shall be designed to withstand or accommodate the effects (including runoff, stream and floodplain erosion, meander cutoffs, lateral migration, ice-jams, and icings) of those meteorologic, hydrologic (including surface and subsurface) and hydraulic conditions considered reasonably possible for the region. The following standards shall apply to PIPELINE design:

A. the PIPELINE shall cross streams underground unless a different means of crossing is approved in writing by the AUTHORIZED OFFICER;

B. the PIPELINE design flood shall be based on the concept of the STANDARD PROJECT FLOOD;

C. the depth of channel scour shall be established by appropriate field investigations and theoretical calculations using those combinations of water velocity and depth that yield the maximum value and at the point of maximum scour, the cover over the pipe shall be at least twenty (20) percent of the computed scour, but not less than four (4) feet;

D. for approved overhead crossings of streams, an analysis shall be made to ensure that support structures are adequately protected from the effects of scour, channel migration, undercutting, ice forces, degradation of permafrost, and other internal and external loads;

E. to avoid channelization along the pipe, appropriate design and construction procedures will be included in the plans required in STIPULATION 1.7.2 and shall be used wherever there is potential for such channelization;

F. all pipe trench excavation shall stop an adequate distance from water crossings to leave a protective plug of unexcavated material at each bank until the stream bed excavation is complete and the pipe laying operation is begun. The pipe trench shall be backfilled with stable material as soon as the pipe is laid.

3.7.1.3. Low water crossings (fords across streams or rivers where any mobile ground equipment is moved on the streambed) shall be designed, constructed, maintained, and restored to standards approved in writing by the AUTHORIZED OFFICER.

3.7.2. Culverts and Bridges

3.7.2.1. Culverts and bridges necessary for the OPERATION of the PIPELINE SYSTEM shall be designed at a minimum to accommodate a fifty (50) year flood in accordance with criteria established by the American Association of State Highway Officials and the Federal Highway Administration and endorsed by the Alaska Department of Transportation and Public Facilities. On waterways where a United States Coast Guard bridge permit is required, bridges shall be designed to accommodate a one hundred (100) year flood in accordance with DOT Order 5650.2.

3.7.2.2. Culverts necessary for the construction, OPERATION or termination of the PIPELINE SYSTEM shall be designed in accordance with DESIGN CRITERIA required by STIPULATION 1.7.2. unless otherwise approved by the AUTHORIZED OFFICER.

3.7.3. Erosion

3.7.3.1. Erosion control shall be performed in accordance with plans required by STIPULATION 1.7.2.

3.7.3.2. To prevent erosion, the AUTHORIZED OFFICER may direct HOLDER to stabilize the culvert inlet and outlet areas by appropriate methods, e.g., by the use of stilling basins or riprap and/or armor.

3.7.3.3. Slopes of cuts through stream banks shall be designed and constructed to minimize erosion and prevent slides.

3.7.3.4. Erosion control procedures shall accommodate and be based on the runoff produced by the maximum rainfall rate and snowmelt rate combination reasonably characteristic of the region. The procedures shall also accommodate effects that result from thawing produced by flowing or ponded water on permafrost terrain and the effects of ice.

3.8. Construction and OPERATION

3.8.1. All construction, OPERATION and termination activities in connection with the PIPELINE shall be conducted so as to avoid or minimize thermal and other environmental changes and to provide maximum protection to the environment (including fish and wildlife and their habitats), subsistence use, public health and safety, and people. All working platforms, pads, fills, and other surface modifications shall be planned and executed in such a way that any resulting degradation of permafrost will not jeopardize the surrounding environment, including foreign pipelines and other structures.

3.8.2. A monitoring program shall be developed by HOLDER as part of the surveillance and maintenance plan required by STIPULATION 1.8.2. which shall identify any PIPELINE movement, that may affect PIPELINE integrity, resulting from frost heave, settlement or seismic forces. This program, including baseline data, shall be finalized and operational prior to transmission of GAS through the PIPELINE.

3.8.3. The HOLDER shall provide plans for corrosion resistant design and methods for early detection of corrosion in accordance with 49 CFR Part 192. This shall include consideration of:

A. pipeline material to be used and information on its particular suitability for the environment involved;

B. details on the external pipe protection to be provided (coating, wrapping, etc.), including information on variations of the coating process to cope with variations in environmental factors along the PIPELINE SYSTEM route;

C. plans for cathodic protection including details of impressed current sources and controls to ensure continuous maintenance of adequate protection over the entire surface of the pipe;

D. details of plans for monitoring cathodic protection current, including spacing of current monitors;

E. provision for periodic intensive surveys of trouble spots, regular preventive maintenance surveys, and special provisions for abnormal potential patterns, especially those resulting from other pipelines or cables;

F. information on any precautions that may be required to prevent internal corrosion of the PIPELINE SYSTEM.

3.9. Containment of Spills of OIL or Other HAZARDOUS SUBSTANCES

3.9.1. HOLDER shall construct containment dikes or other suitable structures around all temporary and permanent PIPELINE storage facilities for OIL or other HAZARDOUS SUBSTANCES or WASTES. The volume of the containment structures shall be at least:

A. one-hundred and ten (110) percent of the total storage volume of the storage tanks in the relevant area, plus

B. an additional volume sufficient to contain the maximum trapped precipitation and runoff which might be impounded at the time of failure of the storage facility. Such containment structures shall be constructed to provide seepage-free storage until disposal of their contents can be safely made without contamination of the surrounding area.

3.9.2. All OIL, HAZARDOUS SUBSTANCES, or HAZARDOUS WASTES utilized or produced during the construction, OPERATION or termination of the PIPELINE, shall be stored in above ground containers surrounded by such containment structures described in STIPULATION 3.9.1. until utilized or disposed of in compliance with applicable Federal and State laws and regulations. Unless otherwise approved in writing by the AUTHORIZED OFFICER, all inlet and outlet piping from storage facilities for OIL, HAZARDOUS SUBSTANCE, OR HAZARDOUS WASTES shall be above ground (or buried in utilidors approved by the AUTHORIZED OFFICER) and all pipe joints shall be welded.

EXHIBIT C

Requirements of the Department of Defense
Relating to Military Installations

Requirements of the Department of Defense
Relating to Military Installations

Definitions:

As used in this Exhibit, the following terms have the meanings indicated:

"INSTALLATION COMMANDER": The Commanding Officer or his duly authorized representative of a military installation, e.g., Fort Wainwright, Fort Greely, Eielson Air Force Base.

"HOLDER": The Yukon Pacific Corporation, an Alaskan corporation.

General Requirements:

1. Entry upon military land for PRE-CONSTRUCTION, construction, OPERATION or termination of the PIPELINE SYSTEM shall be fully coordinated ten (10) days in advance of entry with the appropriate INSTALLATION COMMANDER having immediate jurisdiction over the property. Entry under emergency conditions shall be coordinated expeditiously with the INSTALLATION COMMANDER.
 2. Entry for all activities conducted by the HOLDER upon all military installations shall be in strict compliance with post/base regulations, both existing or hereafter promulgated. The HOLDER shall obtain copies of such regulations from the affected INSTALLATION COMMANDERS.
 3. Ingress and egress to military installations shall be confined to routes designated by the INSTALLATION COMMANDER. Such commander shall have the right to modify or change the designated routes without advance notice to the HOLDER. Use of existing military roads or other access routes across subject lands shall be non-exclusive.
-
4. The HOLDER shall reimburse the United States, through the Army or Air Force installation affected, for any increased maintenance costs of existing military roads resulting from or attributable to usage by the HOLDER. These costs shall be in addition to those contemplated by the rental and reimbursement provisions of the RIGHT-OF-WAY GRANT.
 5. The HOLDER may construct permanent ACCESS ROADS within the RIGHT-OF-WAY, provided such roads do not interfere with the surface use of the area by the military, except during the construction phase.

6. Roads designated by the INSTALLATION COMMANDER to require intermittent military usage may be closed by the HOLDER.

The INSTALLATION COMMANDER shall approve in advance all such closures. Any extended closure shall cause the road to be treated as stated in Section 3 of these General Requirements.

7. Any overhead construction relating to the PIPELINE shall provide for a minimum of eighteen (18) feet of clearance above the existing road surface.
8. Crossover road ramp construction relative to ramp grades, PIPELINE cover, sleeves, bridging, signs and the like will conform to the standards of the Alaska State Highway Department.
9. Final route selection, as mapped, and any subsequent changes thereto across military lands will be approved by the affected INSTALLATION COMMANDER prior to construction. The route of the PIPELINE shall be located so as to avoid military improvements, and any proposed routes near or adjacent to fuel or ammunition storage areas shall be coordinated with the appropriate safety officer and INSTALLATION COMMANDER.
10. Crossing of Army petroleum oil and lubricant (POL) lines will be coordinated with the affected INSTALLATION COMMANDER and the Petroleum Division (AFVR-DL-L), 6th Infantry Division (Light), Fort Richardson, Alaska.
11. Burial depth and technique shall be sufficient to permit surface crossing of the RIGHT-OF-WAY by heavy tracked and wheeled vehicles at designated locations of existing roads and runways. In the event that subsurface construction cannot be accomplished to the satisfaction of the INSTALLATION COMMANDER, the PIPELINE shall be relocated to an area or areas where burial is permissible, or where surface construction can be authorized without interruption of the military mission. CONSTRUCTION MODE shall require the prior consent of the INSTALLATION COMMANDER.
12. Disruption of, or interference with the operation and maintenance of any military pipelines, utility and communication lines is prohibited except by authorization by the INSTALLATION COMMANDER. The PIPELINE shall cross all existing intersecting pipelines, conduits, and cables with a minimum clearance of twelve (12) inches.
13. Maximum length of open trench or trenches during construction of the PIPELINE over and across the subject land shall not exceed one (1) mile at any given time without the prior approval of the INSTALLATION COMMANDER.

14. Suitable bridged crossings over open trenches shall be provided and maintained where necessary to permit passage of military personnel and vehicles; timely notice of requirements will be furnished by the INSTALLATION COMMANDER.
15. In connection with the HOLDER'S duties to repair, replace, and rehabilitate as provided for in Section 9.B.2 contained in the GRANT, where borrowed soil material is necessary to perform such duties, the location and method of obtaining the borrowed material shall be approved by the INSTALLATION COMMANDER. All surplus material not required for fill, backfill or grading shall be spread and leveled in an area designated by said commander.
16. The HOLDER shall submit legal descriptions of the centerline of the RIGHT-OF-WAY and permanent ACCESS ROADS as constructed in, upon, over and across military-controlled lands to the INSTALLATION COMMANDER. Separate legal descriptions shall be written for each noncontiguous tract of military controlled land. Said legal descriptions shall be accompanied by "as-built" drawings together with separate real estate maps in the event sufficient survey information necessary to verify legal descriptions is not contained on the "as-built" drawings.
17. The HOLDER shall install mainline valves sufficient to control flow in the vicinity of populated areas, ammunition/explosive and fuel storage areas.
18. Electrically operated devices installed as part of the PIPELINE which are capable of producing radiation, electro-magnetic or other interference, shall be screened, filtered or otherwise suppressed to the extent that such devices will not adversely affect the function of existing communication systems. In the event that physical obstructions, such as towers or buildings are to be erected as part of the PIPELINE, their positioning shall be such that they will not obstruct radiation patterns of line-of-site communication, navigation aids of other communications, electronic, or meterological services.
19. Entry for PRE-CONSTRUCTION, construction, OPERATION or termination upon installations or crossings of utility facilities under the control of or utilized by Air Force Communications System/White Alice will be coordinated at least ten (10) days prior to entry with 1931st Communications Group through Headquarters, Alaskan Air Command, Elmendorf Air Force Base. Entry under emergency conditions will be coordinated expeditiously with the Communications Group.

20. Should the PIPELINE cross high voltage power transmission lines, adequate precaution to the satisfaction of the INSTALLATION COMMANDER will be taken to insure that excessive sag or accidental powerline breakage does not create a safety hazard.
21. In the event unexploded munitions are discovered by the HOLDER during PRE-CONSTRUCTION, construction, OPERATION or termination activities, such activities shall immediately cease in that area. The HOLDER shall notify the INSTALLATION COMMANDER who will immediately proceed to dispose of the munitions. Activities will not proceed until authorized by the INSTALLATION COMMANDER.
22. The United States reserves to itself the right to construct, use, and maintain across, over and/or under the RIGHT-OF-WAY, oil and sewer lines, and other facilities, in such manner as not to create an unreasonable interference with the use of the RIGHT-OF-WAY.
23. The United States reserves to itself the right to use, occupy, and traverse any and all areas, other than those specified in Section 11 of these General Requirements, on, over, across, and along the RIGHT-OF-WAY with personnel and vehicles for any purpose including, but not limited to, military uses, at the discretion of the INSTALLATION COMMANDER.
24. Any authorized use or occupation of the subject military lands in connection with the PRE-CONSTRUCTION, construction, OPERATION or termination of the PIPELINE shall be subject to such rules and regulations as the installation commanders may from time to time prescribe. The military departments reserve the right to modify or change conditions to protect military interests as circumstances may from time to time warrant.
25. Transportation, storage and use of explosives during ~~PRE-CONSTRUCTION, construction, OPERATION or termination of~~ the PIPELINE shall be permitted only in conformance with the applicable installation regulations. The HOLDER shall secure copies of these regulations from the installation commanders. Use of all explosives on military reservations shall be in strict conformance with U.S. Army, Corps of Engineers Safety Manual, and the HOLDER shall secure copies of this manual from the INSTALLATION COMMANDER. The HOLDER shall submit a plan for approval to the INSTALLATION COMMANDER at least thirty (30) days in advance of any underwater blasting. The plan shall set forth blasting locations, types and amounts of explosives, date or dates of blasting, and the reason for blasting.

26. The HOLDER shall locate and/or install the PIPELINE in such manner so as to preclude the creation of ground fog and/or ice fog conditions which will in any way decrease the operational capability of the air fields located on Eielson Air Force Base, Fort Wainwright or Fort Greely. Studies or other data supporting the location or construction techniques utilized by the HOLDER to accomplish the requirements of this condition shall be submitted to the INSTALLATION COMMANDER for review and approval thirty (30) days prior to commencement of construction on the lands herein described.

27. Prior to commencement of PRE-CONSTRUCTION or construction, the HOLDER shall submit a schedule of their PRE-CONSTRUCTION and construction activities on the military installation involved. This schedule shall be in such detail as may be required by the INSTALLATION COMMANDER and during the course of construction this schedule shall be updated and resubmitted as may be required by the INSTALLATION COMMANDER.

EXHIBIT D

Requirements of the National Oceanic and Atmospheric
Administration Relating to that Agency's Installation

NOAA Specific Stipulations for Gas Pipeline

The objective of these stipulations is to minimize interference with current tracking station operations and to preserve the integrity of the site and its buffer zone for future electromagnetically sensitive operations. These STIPULATIONS are in addition to the STIPULATIONS in Exhibit B of the GRANT of RIGHT-OF-WAY to the Yukon Pacific Corporation (referred to as the HOLDER).

1. The point of contact for all activities on the station shall be the NOAA Station Director; however, any provision in the STIPULATIONS in Exhibit B requiring communications with or through the AUTHORIZED OFFICER or his representative shall be controlling.
2. The PIPELINE route shall be as indicated on the Goddard Space Flight Center Drawing No. 1346809, Revision D, dated November 20, 1980, on file with the Department of the Interior and the HOLDER and incorporated herein by reference.
3. The words "existing communications systems" in paragraph 1.16. Electronically Operated Devices, of Exhibit B, STIPULATIONS, shall be construed to include, without limitation, NOAA tracking and command space communication systems.
4. Access to work areas shall be through the RIGHT-OF-WAY from roads off the station unless otherwise approved by the NOAA Station Director on a case-by-case basis. The HOLDER shall implement traffic control measures at the station entrance road near Steese Highway to redirect PIPELINE-related traffic to the RIGHT-OF-WAY. Pilots overflying the PIPELINE route shall avoid unnecessary maneuvers within sight of the antennas.
5. The HOLDER shall provide a separate legal description of the RIGHT-OF-WAY as constructed in each noncontiguous tract of NOAA land within 90 days of laying pipe, and shall provide ~~as-built drawings of all engineering features within 180 days~~ of completion of construction in the station RIGHT-OF-WAY. The same provisions shall apply to work performed during subsequent maintenance, retrofit, or modification of the PIPELINE or its associated facilities in the station vicinity.
6. The United States reserves to itself the right to construct, use, and maintain across (over and/or under the RIGHT-OF-WAY) fuel and utility lines and other facilities in such manner as not to create an unreasonable interference with use of the RIGHT-OF-WAY.

7. All personnel authorized to enter the station shall observe security procedures, administrative regulations, and management instructions applicable to the station.