# RIGHT-OF-WAY GRANT*

Serial Number: F-24538

In consideration of the representations in the application of the Alaskan Northwest Natural Gas Transportation Company filed July 5, 1977, supplemented July 1, 1980, and with addenda thereto, and the mutual promises and covenants hereinafter set out, the United States of America and the Alaskan Northwest Natural Gas Transportation Company agree as follows:

Pursuant to the Alaska Natural Gas Transportation Act of 1976, 15 U.S.C. 719, Section 28 of the Mineral Leasing Act of 1920, as amended, 30 U.S.C. 185, the regulations of the Department of the Interior in Part 2880, Title 43, Code of Federal Regulations, and the President's September 22, 1977, Decision and Report to the Congress on the Alaska Natural Gas Transportation System (hereinafter referred to as the PRESIDENT'S DECISION), the United States of America (hereinafter referred to as the UNITED STATES) hereby grants to Alaskan Northwest Natural Gas Transportation Company (hereinafter referred to as the COMPANY), a general partnership formed under the laws of the State of New York, whose mailing address is:

c/o Northwest Alaskan Pipeline Company
136 East South Temple
P.O. Box 1526
Salt Lake City, Utah 84110

and whose agent to receive notice of actions is:

Northwest Alaskan Pipeline Company
1100 20th Street, N.W., Suite S-700
Washington, D.C. 20036

a RIGHT-OF-WAY across certain FEDERAL LANDS for the construction, operation, maintenance, and termination of one natural GAS PIPELINE, as such lands are identified in Enclosure C of the COMPANY's supplemental application and are otherwise provided for herein which constitute, with respect to FEDERAL LANDS, the Alaskan Leg of the Alaska Natural Gas Transportation System

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* Terms having special meaning in the body of this RIGHT-OF-WAY GRANT (hereinafter referred to as GRANT), or in the Stipulations (Exhibit A hereof) are capitalized. In pages 1-9 of this GRANT, capitalized terms shall be defined in the manner set forth in 43 CFR Part 2880 if such term is defined in those regulations; if such term is not defined in those regulations, or in the body of the GRANT, then it shall have the definition set forth in the Stipulations. To the extent that a definition in the Stipulations differs from a definition in 43 CFR Part 2880, then the definition in the Stipulations shall apply only to the Stipulations.

described in the PRESIDENT'S DECISION. Excluded from this GRANT are: lands validly selected and unrelinquished, as of the date of execution hereof, by Native Corporations pursuant to the Alaska Native Claims Settlement Act; lands elected by Tetlin Native Corporation pursuant to Section 19(b) of that Act; and lands which are the subject of valid applications for allotments made pursuant to the Act of May 17, 1906 (34 Stat 197), as amended, 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.

The RIGHT-OF-WAY shall be located approximately as shown on the COMPANY's maps identified as "Pipeline Construction" drawing numbers 4680-11(thru 16)-00-C-P, pages 001 thru 131, Revision 3/3A, dated November 1, 1980.

Pursuant to the authority in Section 28(e) of the Mineral Leasing Act, the COMPANY by this instrument also receives a right to make temporary use of such additional FEDERAL LANDS in the vicinity of the PIPELINE at such locations as the SECRETARY or his delegate in his discretion explicitly finds in writing are necessary in connection with the construction, operation, maintenance, or termination of the PIPELINE, or to protect the natural environment or public safety; provided, however, the COMPANY's use of such lands is subject to the conditions in this GRANT and the limitations set forth in specific temporary use permits which shall be issued by the SECRETARY or his delegate.

Pursuant to Section 9(a) of the Alaska Natural Gas Transportation Act, the COMPANY by this instrument receives a right to use certain additional FEDERAL LANDS for RELATED FACILITIES as shall hereafter be identified in supplements to the above referenced COMPANY maps, for the construction, operation, maintenance, and termination of such RELATED FACILITIES; provided, that the SECRETARY or his delegate approves their locations after explicitly finding in writing that such additional RELATED FACILITIES are necessary for the construction and initial operation of the PIPELINE SYSTEM identified in Section 3 of the PRESIDENT'S DECISION.

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

(1) Stability of foundation and other earth materials will be protected and maintained;

(2) The integrity of the PIPELINE will be reasonably protected and maintained;

(3) Significant damage to the environment (including but not limited to fish and wildlife populations and their habitats) will not be caused;

(4) Hazards to public health and safety will not be created;

(5) The TRANS-ALASKA PIPELINE SYSTEM will be reasonably protected from adverse effects of the COMPANY's activities including the activities of its agents, employees and contractors (including subcontractors) and the employees of each of them; and

(6) Provided that in no case will reducing the cost of construction be the sole consideration upon which such approval is based.

The final location of the RIGHT-OF-WAY shall be identified in as-built surveys satisfactory to the FEDERAL INSPECTOR.

NATURE OF GRANT

By this instrument, the COMPANY receives a nonpossessory, nonexclusive right to use certain FEDERAL LANDS, including lands subject to other rights-of-way, for the limited purpose of construction, operation, maintenance, and termination of the PIPELINE specified in this GRANT.

WIDTH OF RIGHT-OF-WAY

The width of the RIGHT-OF-WAY hereby granted is 50 feet plus the ground occupied by the PIPELINE; at RELATED FACILITIES, the RIGHT-OF-WAY extends 25 feet beyond the RELATED FACILITIES; and the RIGHT-OF-WAY includes such additional width as may be authorized as provided in Section 28(d) of the Mineral Leasing Act.

DURATION OF GRANT

A. The GRANT hereby made, subject to renewal provisions of applicable laws and regulations, shall terminate thirty (30) years from the effective date hereof, at noon, eastern standard 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. Notwithstanding the expiration or any renewal of this 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 COMPANY, its successors, or assigns, until they have fully performed their respective obligations and liabilities accruing before or on account of the expiration or prior termination of this GRANT.

INCORPORATION OF CERTAIN DOCUMENTS BY REFERENCE

The following documents are by this reference incorporated into and made a part of this GRANT as fully and effectually as if they were set forth herein in their entirety:

(1) Stipulations for the Alaskan Leg of the Alaska Natural Gas Transportation System, attached hereto as Exhibit A, and referred to in this GRANT as the "Stipulations".

(2) The COMPANY's aforementioned application, supplemental application, addenda thereto, and alignment maps identifying the general route of the PIPELINE.

(3) Requirements of the National Aeronautics and Space Administration relating to that agency's installation, attached hereto as Exhibit B.

(4) Requirements of the Department of Defense relating to military installations, attached hereto as Exhibit C.

(5) Requirements of the Federal Energy Regulatory Commission, attached hereto as Exhibit D.

(6) The terms and conditions set forth in Section 5 of the PRESIDENT'S DECISION.

ENDANGERED AND THREATENED SPECIES

This GRANT is conditioned on compliance with Section 7 of the Endangered Species Act of 1973, as amended, 16 U.S.C. 1536, with respect to the PIPELINE SYSTEM, as directed by the FEDERAL INSPECTOR. In addition, with regard to zones of restricted activities on FEDERAL LANDS, the COMPANY shall comply with the provisions of STIPULATION 2.5.5.1.

RENTAL

The COMPANY shall pay to the UNITED STATES an annual rental, payable in advance. The amount of said payment shall be Seventy Five Thousand Dollars ($75,000.00). This is the estimated fair market rental value for one year. Upon establishment of the final location of the RIGHT-OF-WAY, an appraisal of the fair market rental value will be made; and the COMPANY will be billed for additional rental or credited in the amount of the overpayment, whichever is appropriate. The rental for each succeeding year shall be subject to adjustment from time to time to reflect current fair market rental value.

REIMBURSMENT OF COSTS

A. The COMPANY shall reimburse the UNITED STATES for the costs incurred in monitoring the construction, operation, maintenance, and termination of the PIPELINE in accordance with Section 28(l) of the Mineral Leasing Act of 1920, as amended, 30 U.S.C. 185(l), and applicable regulations.

B. If the COMPANY 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 FEDERAL INSPECTOR. The FEDERAL INSPECTOR shall meet with the COMPANY promptly in an effort to resolve the dispute. If the dispute remains unresolved, the COMPANY shall make payment and may do so under protest, subject to appeal after audit.

C. Whether or not, pursuant to paragraph B above, the COMPANY disputes an item or pays an amount under protest, the COMPANY shall have the right to conduct, at its own expense, reasonable audits by auditors or accountants

designated by the COMPANY, 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 FEDERAL INSPECTOR by not later than the seventy-fifth (75th) day after receipt by the COMPANY 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 FEDERAL INSPECTOR shall meet with the COMPANY with respect to any items still in dispute and shall thereafter rule on the matter and make appropriate adjustments of the COMPANY account. To the extent the dispute is not resolved, the COMPANY may appeal to the FEDERAL INSPECTOR pursuant to the procedures set forth in 43 CFR, Part 4, Subpart E.

LIABILITY

The COMPANY 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 U.S.C. 185(x) and, 43 CFR Sec. 2883.1-4. The COMPANY 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, maintenance or termination of the PIPELINE SYSTEM:

(1) 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;

(2) 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;

(3) 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.

However, this section shall not act to impose strict liability for damage or injury resulting from an act of war, or the negligent acts or omissions of the UNITED STATES. The maximum limitation for strict liability damages 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 or injury occurred.

INDEMNIFICATION OF THE UNITED STATES

In addition to the obligation imposed on the COMPANY by the provisions of 43 CFR Sec. 2883.1-4(e), the COMPANY agrees to indemnify the UNITED STATES for any and all costs or obligations incurred by the UNITED STATES in performing any obligation of the COMPANY under this RIGHT-OF-WAY GRANT.

BONDING

A. The COMPANY 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 SECRETARY, 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 SECRETARY, at all times during the term of this GRANT and until released in writing by the SECRETARY. 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 COMPANY'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 the "Right of the United States to Perform" section 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 COMPANY's liability under any provisions of law.

D. Prior to the issuance of the first NOTICE TO PROCEED for PIPELINE construction, the COMPANY 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 SECRETARY. The requirement for such additional security shall be released in writing by the SECRETARY after completion of construction and commencement of initial operation of the PIPELINE. Such release will not be unreasonably withheld.

E. The SECRETARY reserves the right to require additional security from the COMPANY if at any time the SECRETARY determines it necessary in connection with construction, operation, maintenance, or termination of the PIPELINE.

INSURANCE

The COMPANY 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 SECRETARY, insure the COMPANY'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. Prior to placing the PIPELINE SYSTEM

into operation and until the condition specified below has been satisfied, coverage shall also insure the COMPANY's liabilities to the owners of the TRANS-ALASKA PIPELINE SYSTEM as defined and limited in a separate "Agreement of Mutual Indemnity and Liability" entered into by the COMPANY and the owners of the TRANS-ALASKA PIPELINE SYSTEM, dated November 26, 1980; provided, however, the SECRETARY is authorized to review the amount of insurance required for this purpose at least every five years and to increase the amount required to reflect changed economic factors and conditions, taking into consideration the probable loss exposure of the owners of the TRANS-ALASKA PIPELINE SYSTEM pursuant to terms of the said Agreement. Initially, coverage shall be in the minimum amount of $150 million per occurrence. Subsequent to approval by the FEDERAL INSPECTOR of the FINAL DESIGN for PIPELINE construction in that portion of the PIPELINE SYSTEM from Prudhoe Bay to Delta Junction, and when the COMPANY 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 COMPANY can demonstrate to the SECRETARY net worth of $500 million as evidenced by appropriate financial statements of the COMPANY in its latest annual report (currently Form 2) filed with the Federal Energy Regulatory Commission, such coverage shall then be required solely for the purpose of insuring the COMPANY's aforestated obligations to the UNITED STATES, and the minimum amount shall be $51 million per occurrence.

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 FEDERAL INSPECTOR, the COMPANY (or its agents, employees, contractors, or subcontractors) shall fail or refuse to perform any of the actions required by the provisions listed in this GRANT and the Stipulations, and 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 COMPANY. Prior to the delivery of any such demand, the FEDERAL INSPECTOR shall confer with the COMPANY, unless he deems it impracticable to do so, regarding the required action or actions that are included in the demand.

LIENS

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

B. The foregoing provision 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.

RELEASE OF RIGHT-OF-WAY

A. In connection with the relinquishment, before the expiration of this GRANT, of any right or interest in the RIGHT-OF-WAY, the COMPANY shall execute promptly and deliver to the Department of the Interior, a valid instrument of release, acceptable to the SECRETARY.

B. Each release shall be accompanied by such resolutions and certifications as the SECRETARY may require as to the authority of the COMPANY, or of any officer or agent acting on its behalf, to execute, acknowledge, or deliver and release.

RIGHTS OF THIRD PARTIES

Nothing in this GRANT shall be construed to affect any right or cause of action that otherwise would be available to the COMPANY against any person or entity. The UNITED STATES and the COMPANY 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.

CERTIFICATION OF NONSEGREGATED FACILITIES

By accepting this GRANT, the COMPANY agrees that it shall not maintain or provide any segregated facilities. As used in this certification, the term "segregated facilities" means, but is not limited to, any waiting rooms, work areas, rest rooms and wash rooms, restaurants and other eating areas, time clocks, locker rooms and other storage or dressing areas, parking lots, drinking fountains, recreation or entertainment areas, transportation, and housing facilities provided for employees which are segregated by explicit directive or are in fact segregated on the basis of race, national origin, religion, or color. The COMPANY further agrees not to permit employees to perform their services where segregated facililties are maintained. The COMPANY shall also require a certification from contractors and subcontractors which prohibits them (contractors and subcontractors under the COMPANY) from maintaining segregated facilities. The contractors and subcontractors shall also be prohibited from performing their services at any location where segregated facilities are maintained. The certification shall be given to the COMPANY by the contractors and the subcontractors. The COMPANY will in turn give the certification to the FEDERAL INSPECTOR. The certification shall be submitted to the FEDERAL INSPECTOR on a quarterly, semiannual or annual basis, depending upon the regular reporting time conditions of the individual contracts, or as requested by the FEDERAL INSPECTOR.

EQUAL EMPLOYMENT OPPORTUNITY

The COMPANY shall comply with Condition 11 of the PRESIDENT'S DECISION, Section 17 of the Alaska Natural Gas Transportation Act of 1976, 15 U.S.C. 719, et seq., and the implementing regulations, 43 CFR Part 34. The provisions of 43 CFR 34.6 are by reference incorporated into and made a part of this GRANT, as fully and effectively as if set forth herein in entirety.

SUBSISTENCE

To the extent practicable, the COMPANY 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. The COMPANY will comply promptly with all requirements and orders of the FEDERAL INSPECTOR relative to prevention of damage to such resources, or restoration of such resources damaged by the COMPANY, its agents, contractors, or subcontractors.

TRAINING OF ALASKA NATIVES

In connection with, and to accomplish the objectives of the 43 CFR Part 34 regulations, and the affirmative action plans for the project, the COMPANY shall take the following actions:

A. Enter into an Agreement with the SECRETARY and the FEDERAL INSPECTOR regarding recruitment, testing, training, placement, employment, and job counselling of Alaska Natives;

B. During construction and operation of the PIPELINE SYSTEM, implement, through available public or private sources or its own efforts, a preemployment training program for Alaska Natives designed to qualify them for initial employment in connection with the PIPELINE SYSTEM and for advancement to higher paying positions thereafter;

C. Do everything practicable to secure the employment, in connection with the PIPELINE SYSTEM, of those Alaska Natives who successfully complete the preemployment training program described in subparagraph B above;

D. During construction and operation of the PIPELINE SYSTEM, conduct an on-the-job training program for Alaska Natives. The COMPANY shall inform the FEDERAL INSPECTOR of the discharge from such employment of each and every Alaska Native and of the reason therefor, in advance of such discharge whenever possible or, if advance notice is impossible, as soon thereafter as is practicable; and

E. Furnish such information and reports concerning Alaska Native employment as the FEDERAL INSPECTOR shall require from time to time.

COMPLIANCE

Failure of the COMPANY to comply substantially with any provision of Section 28 of the Mineral Leasing Act of 1920, as amended, 30 U.S.C 185, or the applicable regulations, or of this GRANT shall constitute grounds for suspension or termination of this GRANT.

EFFECTIVE DATE

IN WITNESS WHEREOF,
the parties hereto have duly executed this agreement.

UNITED STATES OF AMERICA

Cecil D. Andrus
Secretary of the Interior

Date December 1, 1980

Northwest Alaskan Pipeline Company,
as agent and operator for Alaskan
Northwest Natural Gas Transportation
Company

John H McMillan
Chairman, Chief Executive Officer

Date December 1, 1980

# EXHIBIT A

## Stipulations for the Alaskan Leg

## of the

## Alaska Natural Gas Transportation System

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# PREAMBLE

## Principles

In the implementation of the Grant of Right-of-Way for the Alaska Natural Gas Transportation System of which these Stipulations are a part, the following principles shall apply:

(1) In the construction, operation, maintenance (including but not limited to a continuing and reasonable program of preventive maintenance), and termination of the PIPELINE SYSTEM, the COMPANY shall employ all practicable means and measures to preserve and protect the environment, as provided in the Stipulations.

(2) The COMPANY 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 COMPANY shall plan, manage, supervise, and implement the construction, operation, maintenance and termination of the PIPELINE SYSTEM in accordance with sound engineering practices.

## Scope

The following Stipulations set forth the standards of environmental and construction performance, and the procedures for the submission and approval of construction plans and environmental safeguards, that are required by Section III, I, of the Terms and Conditions set forth in the Decision and Report to Congress on the Alaska Natural Gas Transportation System which was transmitted to the Congress by the President on September 22, 1977, pursuant to the Alaska Natural Gas Transportation Act of 1976, 15 U.S.C. § 719, et. seq.

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 COMPANY that have no relation to the PIPELINE SYSTEM.

STIPULATIONS
ALASKA

1. GENERAL

1.1 DEFINITIONS

1.1.1. The following definitions apply to terms used in these Stipulations. They shall also apply to terms used in documents to which these Stipulations are attached unless specifically provided otherwise in such documents.*

1.1.2. "AGENCY" means a Federal AGENCY (other than the Office of the FEDERAL INSPECTOR) which, subject to the provisions of Reorganization Plan No. 1 of 1979, has jurisdiction to issue or enforce certificates, rights-of-way, leases, permits, or other authorizations with respect to the Alaska Natural Gas Transportation System.

1.1.3. "AUTHORIZED OFFICER" means the employee of the AGENCY to whom the head of the AGENCY has delegated the authority to administer the authorization of which this Exhibit is a part. "AUTHORIZED OFFICER," where used in these Stipulations with specific references to other Federal AGENCIES or departments with enforcement functions transferred to the FEDERAL INSPECTOR by Reorganization Plan No. 1 of 1979, means an employee so designated by such AGENCY or department pursuant to Reorganization Plan No. 1 of 1979.

1.1.4. The "COMPANY" means Alaskan Northwest Natural Gas Transportation Company, its successors and assigns.

1.1.5. "CONSTRUCTION MODE" means the type of construction to be employed generally with regard to the PIPELINE.

1.1.6. "CONSTRUCTION SEGMENT" means a portion of the PIPELINE SYSTEM, as agreed upon by the COMPANY and the FEDERAL INSPECTOR, that constitutes a complete physical entity or stage, in and of itself, which can be constructed independently of any other portion or stage of the PIPELINE SYSTEM in a designated area or between two given geographical points.

1.1.7. "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.

*The words defined herein are in upper case throughout the body of the Stipulations.

1.1.8. "FEDERAL INSPECTOR" means the officer appointed by the President with the advice and consent of the Senate pursuant to Section 7(a)(5) of the Alaska Natural Gas Transportation Act, 15 U.S.C. § 719e, and Reorganization Plan No. 1 of 1979.

1.1.9. "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.

1.1.10. "FINAL DESIGN" means completed design documents suitable for bid solicitation, including contract plans and specifications; proposed CONSTRUCTION MODES; operational requirements necessary to justify designs; design analysis, including calculations for each particular design feature; all functional and engineering criteria; summaries of engineering tests conducted and their results; and other considerations pertinent to design.

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

1.1.12. "HAZARDOUS SUBSTANCES" means OIL, toxic, or hazardous substances as defined by the Environmental Protection Agency, the Department of Transportation, or as specified in writing by the FEDERAL INSPECTOR in consultation with the Environmental Protection Agency's and the Department of Transportation's AUTHORIZED OFFICERS during the review of the COMPANY'S OIL AND HAZARDOUS SUBSTANCES control cleanup and disposal plan.

1.1.13. "NOTICE TO PROCEED" means a written permission to initiate PIPELINE SYSTEM construction that is issued in accordance with Stipulation 1.7.

1.1.14. "OIL" means oil of any kind or any form, including but not limited to fuel oil, sludge, oil refuse, and oil mixed with WASTE.

1.1.15. "PIPELINE" means all parts of those physical facilities, through which the GAS moves, authorized on FEDERAL LANDS by U. S. Department of the Interior Right-of-Way Grant No. F24538.

1.1.16. "PIPELINE SYSTEM" means all facilities on FEDERAL LANDS which are constructed or used by the COMPANY pursuant to the Alaska Natural Gas Transportation Act in connection with the construction, operation, maintenance or termination of the PIPELINE. The term includes the PIPELINE and RELATED FACILITIES, temporary facilities, temporary use areas and material sites used by the COMPANY for the construction, operation, maintenance, 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.

1.1.17. "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 and maintenance of the PIPELINE. RELATED FACILITIES includes, if applicable: 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 FEDERAL INSPECTOR, after consultation with the COMPANY, shall determine to be RELATED FACILITIES.

1.1.17.1. "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.

1.1.18 "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.

1.1.19. "ROADS" means roads on FEDERAL LANDS, other than State or public highways, that are constructed or used by the COMPANY in connection with the construction, operation, maintenance or termination of the PIPELINE SYSTEM.

1.1.20. "TEMPORARY USE PERMIT" means a revocable, nonpossessory privilege to use specified Federal lands in connection with the preconstruction, construction, operation, maintenance and termination of the PIPELINE SYSTEM.

1.1.21. "TRANS-ALASKA PIPELINE SYSTEM" means that pipeline system referred to in and authorized by the Trans-Alaska Pipeline Authorization Act, Title II, P.L. 93-153, 87 Stat. 584.

1.1.22 "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.

1.1.23. "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 APPLICABILITY

1.2.1. The following conditions shall apply to the design, construction, operation, maintenance, and termination of the PIPELINE SYSTEM. Unless clearly inapplicable, the requirements and prohibitions imposed upon the COMPANY by these Stipulations are also imposed upon the COMPANY'S agents, employees, contractors, and subcontractors, and the employees of each of them.

(1) The COMPANY shall ensure compliance with these Stipulations by its agents, employees, and contractors (including subcontractors at any level), and the employees of each of them.

(2) Failure or refusal of the COMPANY'S agents, employees, contractors, subcontractors, or their employees to comply with these Stipulations shall be deemed to be the failure or refusal of the COMPANY.

(3) Where appropriate the COMPANY shall require its agents, employees, 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.

1.2.2. Nothing in these Stipulations shall be construed as applying to activities of the COMPANY that have no relation to the PIPELINE SYSTEM.

1.2.3. Nothing in these Stipulations shall be construed to affect any right or cause of action that otherwise would be available to the COMPANY against any person or entity. The United States and the COMPANY do not intend to create any rights under these Stipulations that may be enforced by third parties for their own benefit or for the benefit of others.

1.3. RESPONSIBILITIES

1.3.1. The COMPANY shall comply with these Stipulations and lawful orders of the FEDERAL INSPECTOR implementing these Stipulations.

1.3.2. The authority and obligations of the FEDERAL INSPECTOR, as provided in these Stipulations, shall be exercised and met by the FEDERAL INSPECTOR during the period when the Office of the FEDERAL INSPECTOR is in existence pursuant to the provisions of Reorganization Plan No. 1 of 1979.

1.3.3. Upon termination of the Office of the FEDERAL INSPECTOR, the authority and obligations of the FEDERAL INSPECTOR shall be vested in and fulfilled by the AUTHORIZED OFFICERS of the Federal AGENCIES normally having jurisdiction over such matters.

1.3.4. The COMPANY shall designate a representative who shall be empowered on behalf of the COMPANY to communicate with, and to receive and comply with, all communications and orders of the FEDERAL INSPECTOR. The COMPANY shall also designate field representatives who shall be authorized to and at all times be available to communicate and cooperate with field representatives of the FEDERAL INSPECTOR. The COMPANY shall keep the FEDERAL INSPECTOR informed of any change of the COMPANY'S representatives during the construction, operation, maintenance, and termination of the PIPELINE SYSTEM.

1.3.5. The FEDERAL INSPECTOR may require the COMPANY at any time to furnish any or all data related to design, construction, operation, maintenance, and termination activities undertaken in connection with the PIPELINE SYSTEM that may be reasonably relevant to the FEDERAL INSPECTOR's responsibilities in connection with the construction, operation, maintenance, and termination of the PIPELINE SYSTEM; provided, however, that access to such documents is not prohibited or limited by law or regulation, and provided further that any such

data furnished shall be subject to the provisions of the Freedom of Information Act, 5 U.S.C. § 552. The FEDERAL INSPECTOR shall shall make all requests in writing.

1.3.6. Consonant with the provisions of Section 9(d) of the Alaska Natural Gas Transportation Act, 15 U.S.C. § 719(g), the FEDERAL INSPECTOR may, by written order, require the COMPANY to make such modification of the PIPELINE SYSTEM as he deems necessary to protect or maintain stability of foundation and other earth materials; protect or maintain integrity of the PIPELINE SYSTEM; control or prevent significant damage to the environment (including but not limited to fish and wildlife populations and their habitats); remove hazards to public health and safety; or protect the TRANS-ALASKA PIPELINE SYSTEM from any adverse effects of the COMPANY's activities, including the activities of its agents, employees, contractors (including subcontractors) and the employees of each of them.

1.3.7. The absence of any comment by the FEDERAL INSPECTOR or his designated representative on any plan, design, specification, or other document which may be filed by the COMPANY with the FEDERAL INSPECTOR 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 FEDERAL INSPECTOR or the AUTHORIZED OFFICER may be relied upon by the COMPANY unless and until rescinded in writing. The FEDERAL INSPECTOR, will act in writing upon each submission to him in accordance with the agreed-upon schedules developed pursuant to Stipulations 1.6.1. and 1.7.4. Any disapproving action by the FEDERAL INSPECTOR, including any requests for additional information, shall state what additional action is necessary to gain approval.

1.3.8. The FEDERAL INSPECTOR and the Alaska State Pipeline Coordinator shall have a continuing right of access to any part of the PIPELINE SYSTEM at any time for inspection or monitoring and for any other purpose or reason that is consistent with their responsibilities. This right may be exercised by the FEDERAL INSPECTOR and the Alaska State Pipeline Coordinator and their agents and representatives designated in writing including contractors and subcontractors of the FEDERAL INSPECTOR or the State Pipeline Coordinator who are performing work related to the PIPELINE SYSTEM and who are designated in writing. The FEDERAL INSPECTOR and the COMPANY shall agree within 6 months from the date of issuance of the Grant of which these Stipulations are a part, upon procedures to implement this Stipulation, including reasonable advance notification where practicable.

1.3.9. No order or notice given to the COMPANY on behalf of the FEDERAL INSPECTOR shall be effective as to the COMPANY unless prior written notice of the delegation of authority to issue such order or notice has been given to the COMPANY by the FEDERAL INSPECTOR.

1.3.10. In the implementation of Stipulation 1.2.1., the COMPANY will furnish all supervisory-level employees with copies of these Stipulations and will explain the limitations imposed by these Stipulations.

1.3.11. During the design, construction, operation, maintenance and termination of the PIPELINE SYSTEM, the COMPANY shall furnish representatives of the United States, including contractors and subcontractors, involved in field surveillance of the PIPELINE SYSTEM, adequate meals, living quarters and office space, reasonable use of the COMPANY's communications systems, and reasonable surface

and air transportation. For purposes of this Stipulation only, the eligibility for logistic support of individuals involved in field surveillance will be determined by the FEDERAL INSPECTOR. Whenever possible, the FEDERAL INSPECTOR shall give the COMPANY advance written notice of the need for such services and facilities, including the number and names of persons to be accommodated. Reimbursement for such services and facilities will be in accordance with a prearranged unit-price schedule.

1.3.12. The COMPANY shall not interfere with operations of the TRANS-ALASKA PIPELINE SYSTEM, including use of FEDERAL LANDS covered by the TRANS-ALASKA PIPELINE SYSTEM right-of-way, by employees, contractors, subcontractors and agents of the TRANS-ALASKA PIPELINE SYSTEM, except as may be approved in writing by the FEDERAL INSPECTOR.

1.4. COMMUNICATIONS

1.4.1. The COMPANY shall provide a communications capability that ensures the transmission of information required for the safe construction, operation, maintenance and termination of the PIPELINE SYSTEM.

1.4.2. During the period of preconstruction, construction and initial operation of the PIPELINE SYSTEM, all formal written communications between the COMPANY and an AGENCY involving construction, operation, maintenance, or termination of the PIPELINE SYSTEM shall be transmitted through the FEDERAL INSPECTOR or as he may direct. However, documents required by statute or AGENCY regulation to be filed with the AGENCY shall be filed as so required, provided that a copy (or copies) thereof is concurrently filed with the FEDERAL INSPECTOR.

1.4.3. Any written notice or communication, including any telegram, relating to any subject, addressed to the FEDERAL INSPECTOR from the COMPANY, shall be deemed to have been delivered to and received by the FEDERAL INSPECTOR when the notice or communication has been delivered either by messenger during normal business hours, or by registered or certified United States mail, postage prepaid, return receipt requested, to the Office of the FEDERAL INSPECTOR.

1.4.4. Any written order, notice, or other written communication, including any telegram, relating to any subject, that is addressed to the COMPANY from the FEDERAL INSPECTOR shall be deemed to have been delivered to and received by the COMPANY when the order, notice or other communication has been delivered either by messenger during normal business hours, or by registered or certified United States mail, postage prepaid, return receipt requested to the office of the representative designated by the COMPANY pursuant to Stipulation 1.3.4.

1.4.5. All orders or approvals of the FEDERAL INSPECTOR shall be in writing, but in emergencies may be issued orally, with subsequent confirmation in writing as soon as possible thereafter, but not later than 24 hours.

## 1.5. SUMMARY NETWORK ANALYSIS DIAGRAMS

1.5.1. As a part of the DESIGN CRITERIA, the COMPANY shall submit a summary network analysis diagram for the project to the FEDERAL INSPECTOR for review and approval. As mutually agreed to by the COMPANY and the FEDERAL INSPECTOR, 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:

(1) Data collection activities;
(2) Submittal and approval activities;
(3) Construction and post-construction activities;
(4) Schedule control techniques;
(5) Submittal of NOTICE TO PROCEED applications;
(6) 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 FEDERAL INSPECTOR 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.

1.5.2. The summary network analysis diagram shall be updated to indicate current and planned activities at intervals mutually agreeable to the COMPANY and the FEDERAL INSPECTOR.

## 1.6. DESIGN CRITERIA, PLANS AND PROGRAMS

1.6.1. The COMPANY shall submit DESIGN CRITERIA to the FEDERAL INSPECTOR. It shall also submit comprehensive plans and/or programs (including schedules where appropriate) which shall include but not be limited to the following:

(1) Air quality
(2) Blasting
(3) Camps
(4) Clearing
(5) Corrosion control
(6) Cultural resource preservation
(7) Environmental briefings
(8) Erosion and sedimentation control
(9) Fire control
(10) Liquid waste management
(11) Material exploration and extraction
(12) OIL and HAZARDOUS SUBSTANCES control, cleanup and disposal
(13) Overburden and excess material disposal
(14) Pesticides, herbicides, chemicals
(15) PIPELINE contingency
(16) Quality assurance/quality control
(17) Restoration
(18) River training structures
(19) Solid waste management
(20) Stream, river and floodplain crossings
(21) Surveillance and maintenance

(22) Visual resources
(23) WETLAND construction
(24) Seismic
(25) Human-carnivore interaction

These plans and programs may be combined as appropriate. The COMPANY and the FEDERAL INSPECTOR 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) will be coordinated by the COMPANY with the owners of such other facilities during their development. The COMPANY, in particular, will coordinate with the State of Alaska regarding the PIPELINE SYSTEM alignment between Delta Junction and the Canadian border with respect to the proposed realignments of the Alaska Highway between those two locations, giving due consideration to such proposed highway realignments as shown in documents provided to the COMPANY by the State, such as any Federally approved environmental impact statement for the proposed highway realignment project, the latest of any existing State reconnaissance reports, and segmented highway project design documents. Coordination means providing the facility owner an opportunity to review and comment upon relevant parts of the plans and programs. The COMPANY will 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 FEDERAL INSPECTOR will consider suggestions or objections submitted by owners of affected facilities.

1.6.2. The DESIGN CRITERIA, including the plans and programs specified in Stipulation 1.6.1, shall be approved in writing by the FEDERAL INSPECTOR and shall be complied with by the COMPANY.

1.6.3. Additional or supplementary plans may be required in the event that the plans submitted in accordance with Stipulation 1.6.1 do not provide the detailed and/or site-specific data required to support the FINAL DESIGN required in Stipulation 1.7, or to guide the conduct of the construction, operation, maintenance and termination of the PIPELINE SYSTEM.

1.7. NOTICE TO PROCEED

1.7.1. The COMPANY shall not initiate any field 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, TEMPORARY USE PERMIT or other appropriate written authorization, issued by the FEDERAL INSPECTOR or AUTHORIZED OFFICER, as appropriate. Any NOTICE TO PROCEED, TEMPORARY USE PERMIT or other authorization shall permit field activities only as therein expressly stated and only for the particular field activities therein described. A NOTICE TO PROCEED, TEMPORARY USE PERMIT or other appropriate authorization may contain such site-specific terms and conditions as the FEDERAL INSPECTOR or AUTHORIZED OFFICER deems necessary to implement these Stipulations, and the COMPANY will comply with such terms and conditions.

1.7.2. Before applying for a NOTICE TO PROCEED, the COMPANY shall, in such manner as shall be acceptable to the FEDERAL INSPECTOR, locate and clearly mark on the ground the proposed centerline of the line of pipe, the location of all relevant RELATED FACILITIES and, where applicable, clearing limits and the location of temporary use areas in the proposed work area. When the COMPANY is engaged in activities proximate to the TRANS-ALASKA PIPELINE SYSTEM or, in any event, when such activities could pose a threat to the integrity of the TRANS-ALASKA PIPELINE SYSTEM, the COMPANY shall arrange with the owners of the TRANS-ALASKA PIPELINE SYSTEM, in accordance with industry practice, for them to survey and clearly mark on the ground relevant parts of the TRANS-ALASKA PIPELINE SYSTEM, including related facilities.

1.7.3. Each application for a NOTICE TO PROCEED shall be supported by:

(1) A FINAL DESIGN for the CONSTRUCTION SEGMENT OR SEGMENTS to be covered by the NOTICE TO PROCEED with detailed and/or sitespecific plans as indicated in Stipulation 1.6.3 and computations supporting the design;

(2) All applicable reports and results of environmental studies;

(3) A detailed network analysis diagram for the CONSTRUCTION SEGMENT or SEGMENTS including the COMPANY'S work schedules, applicable permits required by State and Federal agencies, design and review periods, data collection activities, and construction sequencing. All requirements stated in Stipulation 1.5.1, with reference to the summary network analysis diagram, shall apply equally to the detailed network analysis diagram;

(4) A map or maps, prepared in such manner as shall be acceptable to the FEDERAL INSPECTOR, depicting the proposed location of:

(a) The boundaries of all associated temporary use areas;

(b) All improvements, buried or aboveground, that are to be constructed;

(c) The relative location of any part of the TRANS-ALASKA PIPELINE SYSTEM that is proximate to the proposed improvements;

(5) Justification statements for all proposed design features or activities which may not be in conformance with these Stipulations;

(6) An analysis which addresses the effects, if any, of PIPELINE SYSTEM design and proposed activities on the TRANS-ALASKA PIPELINE SYSTEM and other existing facilities and, where necessary, which describes systems designed to ensure protection of the TRANS-ALASKA PIPELINE SYSTEM and other existing facilities from damage arising from the construction, operation, maintenance and termination of the PIPELINE SYSTEM.

1.7.4. Prior to submission of any applications for NOTICES TO PROCEED, the COMPANY and the FEDERAL INSPECTOR 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 FEDERAL INSPECTOR 60 days for review of each complete application for a NOTICE TO PROCEED unless the FEDERAL INSPECTOR gives written notice that more time is needed. The schedule may be revised by mutual agreement, if necessary.

1.7.5. The FEDERAL INSPECTOR 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 1.7.4.

1.7.6. The FEDERAL INSPECTOR shall issue a NOTICE TO PROCEED only when, in his judgment, applicable FINAL DESIGNS and other submissions required by Stipulations 1.6.1, 1.6.3, and 1.7.3 conform to these Stipulations.

1.7.7. By written order, following appropriate consultation with the COMPANY, and when other enforcement actions are inadequate or have not been successful, the FEDERAL INSPECTOR 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: (1) protect or maintain stability of foundation and earth materials; (2) protect or maintain integrity of the PIPELINE SYSTEM; (3) control or prevent significant damage to the environment, including but not limited to fish and wildlife populations and their habitats; or (4) remove hazards to public health and safety.

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

1.8. QUALITY ASSURANCE AND CONTROL

1.8.1. 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, maintenance and termination of the PIPELINE SYSTEM. The COMPANY 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 nondestructive 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.

1.8.2. 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 a serious nature, that:

(a) Is susceptible to abatement by the COMPANY;

(b) Could reasonably be expected to arise out of, or affect adversely, design, construction, operation, maintenance, or termination of all or any part of the PIPELINE SYSTEM; and

(c) That at any time may cause or threaten to cause:

(1) 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;

(2) 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

(3) Significant 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, maintenance, 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 COMPANY'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 1.8.2(1) and 1.8.2(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 COMPANY, its contractors, subcontractors, vendors and suppliers critical to the achievement of quality.

1.8.3. The COMPANY (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 shall submit reports to the FEDERAL INSPECTOR to demonstrate such compliance. Such reports shall be submitted quarterly unless otherwise requested by the FEDERAL INSPECTOR.

1.9. CONDUCT OF OPERATIONS

1.9.1. The COMPANY shall perform 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 and shall at all times employ qualified personnel and maintain equipment sufficient for that purpose. The COMPANY shall immediately notify the FEDERAL INSPECTOR of any condition, problem, malfunction, or other occurrence which in any way threatens the safety or integrity of the PIPELINE, or significant harm to the environment. In addition, the COMPANY shall take all reasonable precautions to protect the TRANS-ALASKA PIPELINE SYSTEM from damage caused by the COMPANY during construction, operation, maintenance and termination of the PIPELINE SYSTEM. The COMPANY shall notify the FEDERAL INSPECTOR and the owners of the TRANS-ALASKA PIPELINE SYSTEM of any such condition, problem, malfunction or other occurrence which in any way threatens the integrity of the TRANS-ALASKA PIPELINE SYSTEM.

1.10. SURVEILLANCE AND MAINTENANCE

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

(1) Protect public health and safety;

(2) Control damage to natural resources;

(3) Control erosion;

(4) Maintain PIPELINE integrity;

(5) Control damage to public and private property;

(6) Prevent damage to the TRANS-ALASKA PIPELINE SYSTEM from the COMPANY'S activities including the activities of its agents, employees, contractors (including subcontractors) and the employees of each of them, in connection with the PIPELINE.

1.10.2. The COMPANY shall maintain complete and up-to-date records on construction, operation, maintenance, 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.

1.11. HEALTH AND SAFETY

1.11.1 The COMPANY shall take measures necessary to protect the health and safety of all persons directly affected by activities performed by the COMPANY in the general vicinity of the right-of-way or permit area in connection with construction, operation, maintenance or termination of the PIPELINE SYSTEM, and shall immediately abate any health or safety hazards. The COMPANY shall notify the FEDERAL INSPECTOR of accidents which occur in connection with such activities in frequency and detail identical to Occupational Safety and Health Administration reporting requirements.

1.12. PUBLIC AND PRIVATE IMPROVEMENTS

1.12.1. The COMPANY 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, maintenance and termination of the PIPELINE SYSTEM. This protection shall specifically be provided to the TRANS-ALASKA PIPELINE SYSTEM on FEDERAL LANDS. If it is determined that the COMPANY has caused damage to such public and private improvements, and if the owner so requires, then the COMPANY 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.

1.13. SURVEY MONUMENTS

1.13.1. The COMPANY shall mark and protect all survey monuments encountered during construction, operation, maintenance, 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 COMPANY will notify the FEDERAL INSPECTOR in writing before such disturbance occurs, and the FEDERAL INSPECTOR will provide instructions. A written report to the FEDERAL INSPECTOR will also be made immediately by the COMPANY in the event that any monuments or accessories are inadvertently damaged.

1.13.2. 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, maintenance, or termination of the PIPELINE SYSTEM, the COMPANY 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 FEDERAL INSPECTOR.

1.14. FIRE PREVENTION AND SUPPRESSION

1.14.1. The COMPANY shall promptly notify the FEDERAL INSPECTOR of any fires on, or which may threaten any portion of, the PIPELINE SYSTEM and shall take all measures necessary or appropriate for the prevention and suppression of fires in accordance with applicable law. The COMPANY shall comply with the instructions and directions of the FEDERAL INSPECTOR concerning the use, prevention and suppression of fires on FEDERAL LANDS. Use of open fires in connection with construction, operation, maintenance and termination of the PIPELINE SYSTEM is prohibited on FEDERAL LANDS unless authorized in writing by the FEDERAL INSPECTOR.

The COMPANY shall also promptly notify the owners of the TRANS-ALASKA PIPELINE SYSTEM of any fires on, or which may threaten any portion of, the PIPELINE SYSTEM or the TRANS-ALASKA PIPELINE SYSTEM between Prudhoe Bay and Delta Junction.

1.15. ELECTRONICALLY OPERATED DEVICES

1.15.1. The COMPANY 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, 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 COMPANY shall not obstruct radiation patterns of existing line-of-sight communications systems, navigational aids, or similar systems. The COMPANY shall furnish a report and calculations showing the expected signal levels to the FEDERAL INSPECTOR.

1.16. TERMINATION OF AUTHORIZATION

1.16.1 Upon revocation or termination of the authorization of which these Stipulations are a part, the COMPANY shall remove all improvements and equipment from the FEDERAL LANDS, unless otherwise approved in writing by the FEDERAL INSPECTOR, and provided that restoration which appropriately can be performed prior to such removal has been completed to the satisfaction of the FEDERAL INSPECTOR as required by applicable stipulations. Procedures to abandon a buried PIPELINE shall be in accordance with the requirements specified in 49 CFR Sec 192.727.

1.17. STOP ORDERS

1.17.1. With respect to construction activities conducted under a NOTICE TO PROCEED, field representatives expressly designated in writing by the FEDERAL INSPECTOR may issue a stop order at the site of an activity to a field representative of the COMPANY designated pursuant to Stipulation 1.3.4. The COMPANY shall cease that particular activity immediately. Except in emergencies, all stop orders shall be in writing, and when issued orally, they shall be confirmed in writing within 24 hours. The stop order or a written confirmation of the order shall specify:

(1) The specific construction activity or activities which must be stopped;

(2) The reason for issuance of the order, including a description of the serious and immediate problem which requires the cessation of a particular construction activity;

(3) The name of the designated field representative of the FEDERAL INSPECTOR issuing the order;

(4) The name of the designated field representative of the COMPANY to whom the order is issued;

(5) The time and date of the order and the site of construction activity at which it is issued.

1.17.2 The FEDERAL INSPECTOR shall maintain a record of all such stop orders which includes this same information. Resumption of any construction activity suspended under a stop order shall be immediately authorized by the FEDERAL INSPECTOR or a designated field representative in writing once mitigating, corrective, or alternative measures have been implemented by the COMPANY.

1.17.3 Subject to the provisions of Section 9(d) of the Alaska Natural Gas Transportation Act, 15 U.S.C. §719(g), stop orders may be issued only when:

(1) An issue arises with respect to compliance with these Stipulations or the NOTICE TO PROCEED which authorized the construction activity in question;

(2) The FEDERAL INSPECTOR or his field representative determines that such issue presents problems or conflicts of a serious and immediate nature; and

(3) Mitigating or corrective measures cannot be identified or agreed upon by the FEDERAL INSPECTOR or his field representative and a designated representative of the COMPANY and immediately implemented.

1.18. REGULATION OF ACCESS

1.18.1 The COMPANY shall provide, as necessary, and maintain ROADS and airstrips, the number, location and standards of which shall be approved by the FEDERAL INSPECTOR, to provide for continuing maintenance and surveillance of the PIPELINE SYSTEM.

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

1.18.3. During construction of the PIPELINE, the COMPANY shall provide alternative routes for existing roads and trails at locations and to standards as determined by the FEDERAL INSPECTOR, whether or not these roads or trails are recorded.

1.18.4. The COMPANY shall make provisions for suitable permanent crossings for the public at locations and to standards approved in writing by the FEDERAL INSPECTOR 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.

1.19. USE OF EXISTING FACILITIES

1.19.1. Subject to existing rights vested in other parties, the COMPANY shall use existing facilities to the maximum extent feasible in all construction, operation, maintenance, and termination activities associated with the PIPELINE SYSTEM.

2. ENVIRONMENTAL

2.1. ENVIRONMENTAL BRIEFINGS

2.1.1. The COMPANY 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 1.6.1.

2.2. POLLUTION CONTROL

2.2.1. GENERAL

2.2.1.1. The COMPANY shall construct, operate, maintain, and terminate the PIPELINE SYSTEM in a manner that will avoid or minimize degradation of air, land and water quality. The COMPANY shall comply with applicable air and water quality standards and Federal laws and regulations relating to pollution control or prevention.

2.2.2. WATER AND LAND POLLUTION

2.2.2.1. The COMPANY shall comply with applicable State of Alaska "Water Quality Standards," as approved by the Environmental Protection Agency, and with requirements of the Environmental Protection Agency's National Pollutant Discharge Elimination System discharge permit program.

2.2.2.2. Mobile ground equipment shall not be operated in lakes, WETLANDS, streams, or rivers unless such operation is approved in writing by the FEDERAL INSPECTOR.

2.2.2.3. The temperature of natural surface or ground waters shall not be changed significantly by the PIPELINE SYSTEM or by any constructionrelated activities unless approved in writing by the FEDERAL INSPECTOR.

2.2.2.4. The COMPANY shall comply with the standards for thermal pollution in the 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 COMPANY 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 FEDERAL INSPECTOR prior to use.

2.2.4. SANITATION AND WASTE DISPOSAL

2.2.4.1. All HAZARDOUS SUBSTANCES and WASTE generated in construction, operation, maintenance and termination of the PIPELINE SYSTEM shall be removed or otherwise disposed of in a manner acceptable to the FEDERAL INSPECTOR. All applicable Federal and State requirements will be incorporated in the plans required in Stipulation 1.6.1.

2.2.5. ICE FOG

2.2.5.1. The COMPANY 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.

2.3. BUFFER STRIPS

2.3.1. Where the PIPELINE right-of-way crosses highways, and other roads designated by the FEDERAL INSPECTOR, 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 FEDERAL INSPECTOR.

2.3.2. 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, lakes, and WETLANDS unless otherwise approved in writing by the FEDERAL INSPECTOR.

2.3.3. Undisturbed buffer strips at least 500 feet wide will be maintained between material sites and state highways unless otherwise approved in writing by the FEDERAL INSPECTOR.

## 2.4. EROSION AND SEDIMENTATION CONTROL

### 2.4.1. GENERAL

2.4.1.1. The COMPANY 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.

2.4.1.3. Erosion control measures, including the use of erosion control structures, if necessary, shall be implemented on FEDERAL LANDS in accordance with the plans approved under Stipulation 1.6.1 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 FEDERAL INSPECTOR. 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 STREAMS, RIVERS, FLOODPLAINS AND WETLANDS

2.4.2.1. The COMPANY shall minimize erosion and sedimentation at stream, river and WETLANDS crossings and those parts of the PIPELINE SYSTEM within floodplains, as provided in Stipulation 3.4.

2.4.2.2. 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 FEDERAL INSPECTOR. The COMPANY 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 FEDERAL INSPECTOR.

### 2.4.3. EXCAVATED MATERIAL

2.4.3.1. Excavated material in excess of that required to backfill around any structure, including the pipe, shall be disposed of in accordance with the approved overburden and excess material disposal plan required in Stipulation 1.6.1.

2.4.3.2. Excavated materials shall not be stockpiled in rivers, streams or floodplains, or on ice unless approved in writing by the FEDERAL INSPECTOR. In WETLANDS, stockpiling shall be in accordance with the plan required by Stipulation 1.6.1.

## 2.5. FISH AND WILDLIFE PROTECTION

2.5.1. The COMPANY shall design, construct, operate, maintain and terminate the PIPELINE SYSTEM so as to assure free passage and movement of fish in streams designated by the FEDERAL INSPECTOR. Temporary blockages of fish necessitated by instream activities may be approved. The proposed designs and construction plans shall include the time and place that such temporary blockages may occur.

2.5.2. Pump intakes shall be screened to prevent harm to fish. Screening specifications shall be approved by the FEDERAL INSPECTOR.

2.5.3 When abandoned, water diversion structures shall be removed or plugged and stabilized, unless otherwise approved in writing by the FEDERAL INSPECTOR.

2.5.4. FISH SPAWNING BEDS, FISH REARING AREAS, AND OVERWINTERING AREAS

2.5.4.1. "FISH SPAWNING BEDS" means those areas where anadromous and resident fish deposit their eggs.

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

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

2.5.4.4. The COMPANY shall avoid disturbances to those FISH SPAWNING BEDS, FISH REARING AREAS and OVERWINTERING AREAS designated by the FEDERAL INSPECTOR. However, where disturbances cannot be avoided, proposed modifications and appropriate mitigation measures shall be designed by the COMPANY and approved in writing by the FEDERAL INSPECTOR.

2.5.4.5. The COMPANY shall protect FISH SPAWNING BEDS, FISH REARING AREAS and 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.

2.5.4.6. The COMPANY shall comply with any site-specific terms and conditions imposed by the FEDERAL INSPECTOR to protect FISH SPAWNING BEDS, FISH REARING AREAS and OVERWINTERING AREAS from the effects of the COMPANY's activities. If material sites are approved adjacent to or in lakes, rivers, streams, WETLANDS, or floodplains, the FEDERAL INSPECTOR may require the COMPANY to construct levees or berms or employ other suitable means to protect fish and fish passage and to prevent or minimize sedimentation. The COMPANY shall repair damage to such areas caused by construction, operation, maintenance or termination of the PIPELINE SYSTEM to the satisfaction of the FEDERAL INSPECTOR as stated in writing.

2.5.4.7. The COMPANY shall not take water from FISH SPAWNING BEDS, FISH REARING AREAS and OVERWINTERING AREAS or waters that directly replenish those areas during critical periods that will be defined by the FEDERAL INSPECTOR, unless otherwise approved by the FEDERAL INSPECTOR.

2.5.5. ZONES OF RESTRICTED ACTIVITIES

2.5.5.1. Activities of the COMPANY in connection with construction, operation, maintenance 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 FEDERAL INSPECTOR during periods of fish and wildlife breeding, nesting, spawning, lambing and calving activity, overwintering, and during major migrations of fish and wildlife. The FEDERAL INSPECTOR shall provide the COMPANY written notice of such restrictive action. At least annually, and as far in advance of such restrictions as is possible, the FEDERAL INSPECTOR shall furnish the COMPANY an updated list of those areas where such actions may be required, together with anticipated dates of restriction.

2.5.6. BIG GAME MOVEMENTS

2.5.6.1. The COMPANY shall design, construct and maintain both the buried and aboveground sections of the PIPELINE so as to assure free passage and movement of big game animals.

2.6. PURCHASE OF MATERIALS AND TIMBER

2.6.1. If the COMPANY requires mineral materials from lands of the United States, it shall make application to purchase such materials in accordance with 43 CFR Part 3610 and shall submit a mining plan in accordance with 43 CFR Part 23. No materials may be removed by the COMPANY without written approval. Application to purchase merchantable timber shall be made in accordance with 43 CFR Part 5400.

2.6.2. LAYOUT OF MATERIAL SITES

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

2.7. CLEARING

2.7.1. BOUNDARIES

2.7.1.1. The COMPANY shall identify clearing boundaries on the ground which shall be approved by the FEDERAL INSPECTOR 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 the COMPANY and approved by the FEDERAL INSPECTOR.

2.7.2. CLEARING PROCEDURES

2.7.2.1. 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.

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

2.7.2.3. Hand clearing shall be used in areas where the FEDERAL INSPECTOR determines that use of heavy equipment would be detrimental to existing conditions.

2.7.2.4. All debris resulting from clearing operations and construction that may block streamflow, delay fish passage, contribute to flood damage, or result in streambed scour or erosion shall be removed within 48 hours unless otherwise approved or directed by the FEDERAL INSPECTOR.

2.7.3. DISPOSAL OF CLEARING DEBRIS

2.7.3.1. All slash shall be disposed of in construction pads or ROADS unless otherwise approved in writing by the FEDERAL INSPECTOR. Slash shall be disposed of prior to the end of the first winter after cutting.

2.7.3.2. Disposal of vegetation, nonmerchantable timber, overburden and other materials removed during clearing operations shall be addressed in the plans required in Stipulation 1.6.1 and approved in writing by the FEDERAL INSPECTOR.

2.8. DISTURBANCE OR USE OF NATURAL WATERS

2.8.1. All activities of the COMPANY 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 streambeds are prohibited unless such activities along with necessary mitigation measures are approved in writing by the FEDERAL INSPECTOR.

2.8.2. The COMPANY shall not develop or utilize any wells or surface water sources on FEDERAL LANDS for the construction, operation, maintenance and termination of the PIPELINE SYSTEM without the prior written approval of the FEDERAL INSPECTOR.

2.9. OFF RIGHT-OF-WAY TRAFFIC

2.9.1. The COMPANY 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 FEDERAL INSPECTOR or when necessary to prevent immediate harm to any person or property.

2.10. VISUAL RESOURCES

2.10.1. The COMPANY shall consider visual resources in planning, construction, operation and termination of the PIPELINE SYSTEM. The COMPANY shall prepare a visual resource plan for the PIPELINE SYSTEM in accordance with Stipulation 1.6.1.

2.11. USE OF EXPLOSIVES

2.11.1. The COMPANY shall submit a plan for storage and use of explosives, including but not limited to blasting techniques, to the FEDERAL INSPECTOR for approval in accordance with Stipulation 1.6.1.

2.11.2. No blasting shall be done under water or within one quarter (1/4) mile of streams or lakes with identified fisheries or wildlife resources without written approval of the FEDERAL INSPECTOR.

2.11.3. Timing and location of blasting shall be approved by the FEDERAL INSPECTOR.

2.12. RESTORATION

2.12.1. Upon completion of use, the COMPANY shall restore all areas of FEDERAL LANDS disturbed by it, in accordance with schedules approved by the FEDERAL INSPECTOR and approved plans required under Stipulation 1.6.1. Restoration performed by the COMPANY shall be approved in writing by the FEDERAL INSPECTOR.

2.12.2. Restoration includes, where appropriate, erosion and sediment control, REVEGETATION, reestablishment of native species, visual amelioration and stabilization. Unless otherwise directed by the FEDERAL INSPECTOR, 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 the COMPANY in a manner satisfactory to the FEDERAL INSPECTOR.

2.12.3. REVEGETATION of disturbed areas of FEDERAL LANDS shall be accomplished as soon as practicable in accordance with plans and schedules required under Stipulation 1.6.1. The results of REVEGETATION must be satisfactory to the FEDERAL INSPECTOR, as stated in writing.

2.12.4. The COMPANY shall dispose of all materials from 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 FEDERAL INSPECTOR.

2.12.5. Pending restoration of a disturbed area of FEDERAL LANDS, the COMPANY shall maintain the area in a stabilized condition satisfactory to the FEDERAL INSPECTOR.

2.12.6. Upon completion of restoration of an area of FEDERAL LANDS, the COMPANY shall remove all equipment and supplies from that area in accordance with approved restoration plans, unless otherwise directed by the FEDERAL INSPECTOR.

2.12.7. The COMPANY shall maintain all restored areas of FEDERAL LANDS in accordance with approved plans required under Stipulation 1.6.1.

2.13. REPORTING, PREVENTION, CONTROL, CLEANUP AND DISPOSAL OF OIL AND HAZARDOUS SUBSTANCES DISCHARGES

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

(1) The FEDERAL INSPECTOR and

(2) Such other Federal and State officials as are required by law to be given such notice.

Any oral notice shall be confirmed in writing as soon as possible.

2.13.2. The COMPANY shall submit an OIL and HAZARDOUS SUBSTANCE control, cleanup and disposal plan to the FEDERAL INSPECTOR in accordance with Stipulation 1.6.1, 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 FEDERAL INSPECTOR, and the COMPANY shall demonstrate its capability and readiness to execute the plan.

2.14. PIPELINE CONTINGENCY PLAN

2.14.1. The COMPANY shall submit a PIPELINE contingency plan to the FEDERAL INSPECTOR in accordance with Stipulation 1.6.1. 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 FEDERAL INSPECTOR prior to PIPELINE startup, and the COMPANY shall demonstrate its capability and readiness to execute the plan.

2.14.2. The COMPANY shall, as appropriate, update the plan and methods of implementation thereof, which shall be submitted annually to the FEDERAL INSPECTOR.

2.15. CULTURAL RESOURCES

2.15.1. The COMPANY 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 appropriate Federal and State officials, and developed in consultation with the COMPANY. 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.

2.16. HUNTING, FISHING AND TRAPPING

2.16.1. The COMPANY shall inform its employees, agents, contractors, subcontractors and their employees of applicable laws and regulations relating to hunting, fishing, and trapping.

2.17. SMALL CRAFT PASSAGE

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

3. TECHNICAL

3.1. PIPELINE SYSTEM STANDARDS

3.1.1. GENERAL STANDARDS

3.1.1.1. All design, including selection of material, and construction, operation, maintenance and termination practices employed with respect to the PIPELINE SYSTEM shall be in accordance with sound engineering practice and, with regard to the PIPELINE, shall meet or exceed the Department of Transportation Regulations, 49 CFR, Parts 191, "Reports of Leaks," and 192, "Transportation of Natural and Other Gas by Pipelines: Minimum Federal Safety Standards."

3.1.1.2. Requirements in addition to those set forth in the above minimum standards may be imposed by the FEDERAL INSPECTOR as necessary to reflect the impact of subarctic and arctic environments. The FEDERAL INSPECTOR will make every effort to identify such additional requirements during the design phase.

3.1.2. SPECIFIC STANDARDS

3.1.2.1. 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 FEDERAL INSPECTOR during the DESIGN CRITERIA reviews to accommodate potentially hazardous areas, other facilities and environmental values.

3.1.2.2. The COMPANY 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 defect acceptablility standards approved by the FEDERAL INSPECTOR. Where radiography is used, x-ray radiography will be used, unless otherwise approved by the FEDERAL INSPECTOR.

3.1.2.3. The PIPELINE design for construction in environmentally sensitive areas designated by the FEDERAL INSPECTOR, shall provide for minimum maintenance needs to reduce reentry requirements.

3.1.2.4. All practicable means shall be utilized to minimize injury to the ground organic layer.

3.1.2.5. 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.

3.1.2.6. All construction, operation, maintenance and termination activities in connection with the PIPELINE SYSTEM shall be conducted so as to avoid or minimize thermal changes. All working platforms, pads, fills and other surface modifications shall be planned and executed in such a way that any resulting alteration of permafrost will not jeopardize PIPELINE integrity and the surrounding environment.

3.1.2.7. A monitoring program shall be developed by the COMPANY as part of the surveillance and maintenance plan required by Stipulation 1.6.1, 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.

3.1.3. STANDARDS FOR ROADS

3.1.3.1. The COMPANY shall submit a layout of each proposed ROAD for approval by the FEDERAL INSPECTOR in accordance with Stipulation 1.7.

3.1.3.2. ROADS constructed by the COMPANY shall be constructed and maintained to standards suitable for safe operation of equipment at the travel speeds proposed by the COMPANY in accordance with Stipulation 3.1.3.3.

3.1.3.3. Design, materials and construction practices employed for ROADS shall be in accordance with safe and proven engineering practice. ROADS intended for permanent use shall be constructed in accordance with generally accepted principles of construction for secondary roads for the subarctic and arctic environments. Existing roads approved for use by the COMPANY that do not meet these standards need not be upgraded, subject to approval of the FEDERAL INSPECTOR, provided that the basic access requirements imposed by Stipulation 1.18 are satisfied.

3.1.3.4. The maximum allowable grade shall be 12 percent, unless otherwise approved in writing by the FEDERAL INSPECTOR.

## 3.2. EARTHQUAKES AND FAULT DISPLACEMENTS

### 3.2.1. EARTHQUAKES

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

| ZONE | Richter Magnitude |
|---|---|
| Canadian/Alaska Border to Big Delta | 6.5 |
| Big Delta to 67 deg. N. | 7.5 |
| 67 deg. N. to Prudhoe Bay | 5.5 |

3.2.1.2. The COMPANY shall provide a seismic monitoring system, to be approved by the FEDERAL INSPECTOR, and shall ensure there are adequate procedures for the safe shutdown of the PIPELINE under seismic conditions thay may affect PIPELINE integrity. Such procedures, to be considered adequate, shall include but not necessarily be limited to:

(1) Communication capability with all key operating control points on the PIPELINE SYSTEM, the GAS processing plant, and other parties with seismic monitoring capabilities, as appropriate;

(2) A control center and alternate for the PIPELINE SYSTEM;

(3) Operating procedures establishing the actions to be taken in the event of seismic conditions that may affect PIPELINE integrity;

(4) Seismic sensors as necessary to supplement existing monitoring capabilities.

### 3.2.2. FAULT DISPLACEMENTS

3.2.2.1. Prior to applying for a NOTICE TO PROCEED for any CONSTRUCTION SEGMENT, the COMPANY shall satisfy the FEDERAL INSPECTOR that all recognizable or reasonably inferred faults or fault zones along the alignment within that CONSTRUCTION SEGMENT have been identified and delineated and any risk of major PIPELINE damage resulting from fault movement and ground deformation has been adequately

assessed and provided for in the design of the PIPELINE SYSTEM for that CONSTRUCTION SEGMENT. 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 tabulated in Stipulation 3.2.1.1 and with observed relationships between earthquake magnitude and extent and amount of deformation and fault slip within the fault zone.

3.2.2.2. Minimum DESIGN CRITERIA for any portion of the PIPELINE SYSTEM traversing a fault zone that is interpreted by the FEDERAL INSPECTOR as active shall be: (1) that the PIPELINE 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; and (2) that no storage tank or compressor station be located within the fault zone unless otherwise approved by the FEDERAL INSPECTOR.

3.3. SLOPE STABILITY

3.3.1. 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 analyses, shall provide measures to prevent the occurrence of, or protect the PIPELINE SYSTEM from, the effects of mass movement. The PIPELINE SYSTEM shall be designed to protect existing facilities, including the TRANS-ALASKA PIPELINE SYSTEM, from the effects of mass movement caused by the COMPANY's activities or the activities of its agents, employees, contractors (including activities or the activities of its agents, employees, contractors (including subcontractors) and the employees of each of them and shall not adversely affect slope stability protection measures of existing structures.

3.4. STREAM AND FLOODPLAIN CROSSINGS

3.4.1. GENERAL

3.4.1.1. The PIPELINE SYSTEM shall be designed so as to minimize the number of stream and WETLAND 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 water body, and the effect of any alteration in these factors caused by the COMPANY's activities or the activities of its agents, employees, contractors (including subcontractors) and the employees of each of them upon existing facilities, including the TRANS-ALASKA PIPELINE SYSTEM.

3.4.1.2. 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 and hydrologic (including surface and subsurface) conditions considered characteristic for each hydrologic region. For stream crossings and portions of the PIPELINE within the floodplain, the following standards shall apply to such PIPELINE design.

3.4.1.2.1. The design flood shall be based on the concept of the "Standard Project Flood" as defined in Corps of Engineers Bulletin 52-8, Part 1, unless otherwise approved by the FEDERAL INSPECTOR.

3.4.1.2.2. 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. At the point of maximum scour, the cover over the top of the pipe shall be at least twenty (20) percent of the computed scour, but not less than four (4) feet.

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

3.4.1.2.4. To avoid channelization along the pipe, appropriate design and construction procedures will be included in the plans required in Stipulation 1.6.1 and shall be used wherever there is potential for such channelization.

3.4.1.2.5. Methods of constructing stream crossings, including excavation and backfill of pipe trench near and through streambanks and existing rivertraining structures, shall be approved in writing by the FEDERAL INSPECTOR prior to initiation of construction.

3.4.1.3. 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 FEDERAL INSPECTOR.

3.4.2. EROSION

3.4.2.1 To prevent erosion, the culvert inlet and outlet areas shall be stabilized by appropriate methods, e.g., by the use of stilling basins or riprap.

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

3.4.2.3. Erosion control procedures shall accommodate and be based on the runoff produced by the rainfall rate and snow melt combination 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.

3.4.3. CULVERTS AND BRIDGES

3.4.3.1. Culverts and bridges necessary for operation and maintenance of the PIPELINE 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 State of Alaska Department of Transportation.

3.4.3.2. Culverts necessary for construction or operation of the PIPELINE SYSTEM shall be installed a minimum of six (6) inches below the thalweg in fish streams identified by the FEDERAL INSPECTOR.

3.5. PIPELINE CORROSION

3.5.1. The COMPANY shall provide plans, as required by Stipulation 1.6.1, for corrosion resistant design and methods for early detection of corrosion in accordance with 49 CFR Part 192. This shall include consideration of:

(1) Pipeline material to be used and information on its particular suitablility for the environment involved;

(2) 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 route;

(3) 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;

(4) Details of plans for monitoring cathodic protection current, including spacing of current monitors;

(5) 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;

(6) Information on any precautions that may be required to prevent internal corrosion of the PIPELINE.

3.6. CONSTRUCTION MODE REQUIREMENTS

3.6.1. 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 FEDERAL INSPECTOR for approval prior to pipe installation, in accordance with Stipulation 1.7.

EXHIBIT B

Requirements of the National Aeronautics and Space Administration

Relating to that Agency's Installation

NASA Specific Stipulations for Gas Pipeline
NASA/SWDN Alaska Station

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 A of the Grant of Right-of-Way to the Alaskan Northwest Natural Gas Transportation Company (referred to as the COMPANY).

1. The point of contact for all activities on the station shall be the NASA Station Director; however, any provision in the stipulations in Exhibit A requiring communications with or through the Federal Inspector 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 COMPANY and incorporated herein by reference.

3. The words "existing communications systems" in paragraph 1.15, Electronically Operated Devices, of Exhibit A, Stipulations, shall be construed to include, without limitation, NASA/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 NASA Station Director on a case-by-case basis. The COMPANY 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 COMPANY shall provide a separate legal description of the right-of-way as constructed in each noncontiguous tract of NASA 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.

# EXHIBIT C

## Requirements of the Department of Defense Relating to Military Installations

Requirements of the Department of Defense
Relating to Military Installations

A. 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.

"COMPANY": The Alaskan Northwest Natural Gas Transportation Company, a general partnership formed under the laws of the State of New York.

B. General Requirements

1. Entry upon military land for preconstruction, construction, operation, maintenance, 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 COMPANY upon all military installations shall be in strict compliance with post/base regulations, both existing or hereafter promulgated. The COMPANY 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 COMPANY. Use of existing military roads or other access routes across subject lands shall be non-exclusive.

4. The COMPANY 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 COMPANY. These costs shall be in addition to those contemplated by the rental and reimbursement provisions of the right-of-way grant.

5. The COMPANY may construct permanent access and maintenance 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 COMPANY. 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 (AFZT-DI-L), 172d Infantry Brigade, 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. Mode of construction 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 clearence 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 COMPANY's duties to repair, replace, and rehabilitate as provided for in Stipulation 1.8.2.(2) contained in Exhibit A, 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 COMPANY shall submit legal descriptions of the centerline of the right-of-way and permanent access and maintenance 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 COMPANY 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 or other communications, electronic, or meterological services.

19. Entry for preconstruction, construction, operation, maintenance, 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 COMPANY during preconstruction, construction, operation, maintenance, or termination activities, activities shall immediately cease in that area. The COMPANY shall notify the INSTALLATION COMMANDER who will immediately proceed to dispose of the munitions. Activities shall 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 preconstruction, construction, operation, maintenance, 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 preconstruction, construction, operation, maintenance, or termination of the pipeline shall be permitted only in conformance with the applicable installation regulations. The COMPANY 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 COMPANY shall secure copies of this manual from the INSTALLATION COMMANDER. The COMPANY 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 COMPANY 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 COMPANY 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 preconstruciton or construction, the COMPANY shall submit a schedule of their preconstruction 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

Federal Energy Regulatory Commission

Requirements of the Federal Energy Regulatory Commission.

A. In the event that lands within Power Site Classification No. 445 dated January 5, 1965 are required for hydroelectric development purposes, any structures or improvements placed thereon found to interfere with such development shall be removed or relocated as necessary to eliminate such interference at no cost to the United States or its permittees or licensees.

B. Prior to the issuance of a NOTICE TO PROCEED the COMPANY must obtain a certificate of public convenience under the Natural Gas Act, 15 U.S.C. 717.