NPAEN-DB-AR

27 February 1970

SUBJECT: Salvage of Pipe - Dezdeash Lake Area, Contract DACA85-70-C-0018

70-B-0001

Commanding Officer USARAL Support Command ATTN: ARCL-F U.S. Army Forces, Alaska APO 98749

- 1. As a result of the recent visit by Mr. W. P. Riley, certain factors have arisen which cast doubt as to whether the salvage of the pipe between approximately Mileposts 114 and 126 of the Haines-Fairbanks Pipeline should be accomplished in the manner required under subject contract. Mr. Riley's apparent recommendation is that the Canadian-U.S. agreement will not be renewed in 1973 and that no additional repairs or reconditioning will be accomplished during the interim period. The Canadian Government will be advised that only routine repairs and maintenance are now anticipated until 1973. According to Mr. Riley, if a major break occurs prior to this date the pipeline will cease operation.
- 2. It was originally anticipated that the pipe salvaged under subject contract would be reused in subsequent contracts for major repairs. The current DOT regulations are far more severe on the matter of reusing pipe for repair and reconditioning pipelines. While Mr. Riley stated that military pipelines don't fall within the purview of the DOT regulations, this office believes that the National Energy Board of Canada would insist that the DOT regulations be followed in the case of major repair or reconditioning work in Canada.
- 3. The present contract requirements call for the existing pipe to be examined, cut up in lengths of approximately 40 feet, sprayed with Santolene "C", capped with plastic caps and stockpiled. All pipe found to have severe corrosion is to be marked, removed, and disposed of by the contractor.
- 4. The funds utilized for this contract were FY 70 M&O funds; therefore, if a change order were issued to the present contract relieving the contractor of the need to salvage, protect and stockpile the pipe and instead turn over the pipe to the contractor for disposal, an appreciable credit could result to the Government. This would free this amount of funds for additional FY 70 projects required by your command.

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NPAEN-DB-AR 27 February 1970 SUBJECT: Salvage of Pipe - Dezdeash Lake Area, Contract DACA85-70-C-0018

- 5. The present contract also requires the purging of the existing line with alcohol which involves considerable costs not only for the alcohol but also for tanks and equipment. If the fuel remaining in the existing pipes were to be displaced with water an additional savings could accrue. This latter procedure would probably have to be cleared with the Canadian officials.
- 6. Your early consideration is requested.

FOR THE DISTRICT ENGINEER:

WARREN GEORGE Chief, Engineering Division 27 Feb 70 Hend Art (sor George

Herrle/nw/4-188

OREC: Engr Div

Copy furnished:

ALCOM ATTN: J-4 USARAL ATTN: ARAEN-I NPD ATTN: NPDEN-TE AE, Fairbanks

Const Div Mech Sec -PEAR

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ARCL-F (27 Feb 70) 1st Ind

SUBJECT: Salvage of Pipe - Dezdeash Lake Area, Contract DACA85-70-C-0018

Headquarters, United States Army, Alaska Support Command, APO 98749
8 MAR 1970

TO: Commanding General, United States Army, Alaska, ATTN: ARAGL, APO 98749

- 1. Reference is made to the last sentence of paragraph 1 of the basic letter. It is assumed that the term "major break" is intended to mean a leak which causes contamination over a large area and/or a leak which for some reason requires some time to correct. The magnitude of contamination depends on several factors (a) the hydraulic pressure gradient at the point of rupture (b) the topography or drainage conditions at the point of rupture (c) the time required to pinpoint the rupture and complete repairs and (d) measures taken to minimize contamination and to effect decontamination procedures. The only major contamination that has occurred to date was on Dezadeash Lake, Yukon Territory, May 1968. As a result, operating pressure along the line has been reduced as a deterrent measure. Maintenance of the pipeline, other than equipment and facility maintenance, is conducted as required when the pipeline develops a leak. This command has submitted several recommendations for preventive maintenance of the pipeline which have not as yet received recognition, i.e., DA Form 1391, Rev 1, Repair Portion of Haines-Fairbanks Pipeline. This command is adequately staffed to handle line breaks which may occur. This staffing is also competent to completely repair the line and return it to operation levels, however, additional manning may be required for control of contamination and subsequent clean-up. (Reference SOP 141-84-46, attached).
- 2. In reference to paragraphs 2, 3, and 4 of the basic letter this office is receptive to negotiations with the contractor by the Alaska District Engineers for disposal of the salvaged pipe by the contractor. The pipeline may not have a useful economical life to the US Army considering the proposed availability of commercial petroleum products at Fairbanks and negotiations for the contractor to dispose of the replaced pipe may result in a monetary saving to the government. In view of the revised DOT regulations which are more stringent in pipe specifications it is felt that the reuse of salvaged pipe may not be economical nor comply with DOT regulations. It is suggested that consideration be given to abandoning the buried portions of the old line in place. This is assuming that such a move would be acceptable to the Canadian Government. It would seem that such a move would reduce to the total contract cost even more. All of the buried portions are believed to be the poorest portions of the pipe and as such would be of very little value to the contractor.

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ARAEN-I (27 Feb 70) 2d Ind SUBJECT: Salvage of Fipe - Dezheash Lake Area, Contract DACA85-70-C-0018

DA, HEADQUERTERS, UNITED STATES ARMY, ALASKA, APO 98749 21 MAR 1970

TO: Commanding Officer, USARAL Support Command, ATTN: ARCL-F, US Army Forces, Alaska, APO 98749

- 1. The Engineer, Alaska District, should be requested to take the following actions relative to Contract DACA85-70-C-0018:
- a. Obtain approval of the Canadian government to abandon in place the buried portions of the old pipeline, and, subsequent to this action, negotiate implementing change orders to the contract.
- b. Use alcohol for purging the twelve miles of replaced pipe in accordance with the comments made in paragraph 3 of the preceding 1st Indorsement.
- 2. With reference to paragraph 1 of the basic letter, the final report, based on Mr. Riley's staff visit, is still in preparation. Until formal findings are furnished this headquarters for review and action, standards of operation and maintenance of the Haines-Fairbanks POL pipeline should be kept at current levels.

FOR THE COMMANDER:

l Incl

Major, AGC

Asst Adjutant General

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ARCL-F

SUBJECT: Salvage of Pipe - Dezdeash Lake Area, Contract DACA85-70-C-0018

The Petroleum Distribution Office has advanced funds in the amount of \$155,000 for the study and design specifications for the repair of the south portion of the Haines-Fairbanks pipeline. Approximately \$125,000 of this amount has been charged to the Dezadeash 12 mile repair. This command is of the opinion that negotiations with the contractor should not require additional funds for this purpose.

- 3. Reference is made to paragraph 3 of the basic letter. The Petroleum Distribution Office will not delete the requirement of alcohol purging of the twelve miles of replaced pipe due to the need of maintaining the maximum quality control possible in order to meet minimum Air Force standards. However, since the original concept of re-using the alcohol at more than one repair site, is no longer valid, the amount of alcohol required may be reduced to 10,000 gallons rather than the original 15,000 gallons.
- 4. In view of the above statements this command recommends negotiation be conducted with the contractor to provide a cost reduction for the salvage and removal of the replaced 8" pipe and that concurrence for such change in contract negotiations be obtained from the Petroleum Distribution Office.
- 5. This indorsement is submitted for comment and guidance.

FOR THE COMMANDER:

1 Incl

CHARLES M. HANSON

Captain TC Asst. Adjutant

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ARCL-F (27 Feb 70) 3rd Ind SUBJECT: Salvage of Pipe - Dezadeash Lake Area, Contract DACA!

HEADQUARTERS, UNITED STATES ARMY, ALASKA SUPPORT COMMAND, APO

TO: District Engineer, Alaska District, Corps of Engineers, ATIN: NPAEN-DB-AR, P. O. Box 7002, Anchorage, Alaska 99501

- 1. Reference is made to paragraph 4 of the basic letter and first and second indorsements thereto. This command concurs with the suggestion of relieving the contractor of the need to salvage, protect and stockpile the used pipe and instead, turn over the pipe to the contractor for disposal. It is also requested that consideration be given to abandoning buried portions of the old pipeline providing approval can be obtained from the Canadian Government and that no deleterious effect on the new pipeline is possible from electrolysis. It is suggested that this used pipe if left buried in its relative location to the new pipe may be utilized for partial or total cathodic protection in the buried sections.
- 2. Reference is made to paragraph 5 of the basic letter. The requirement for alcohol purging remains in force. However, the total amount of alcohol is reduced from 15,000 to 10,000 gallons.
- 3. This command requests that concurrence for any negotiations with the contractor for cost reduction of the contract as indicated above be obtained from the Petroleum Distribution Office.

FOR THE COMMANDER:

1 Incl

CHARLES M. HANSON

Captain TC
Asst. Adjutant

NPAEN-DB-M (27 Feb 70) 4th Ind

SUBJECT: Salvage of Pipe - Dezadeash Lake Area, Contract DACA85-70-C-0018

DA, Alaska District, Corps of Engineers, PO Box 7002, Anchorage, Alaska 99501 6 May 1970

TO: Commanding Officer, USARAL, ATTN: ARCL-F, U.S. Army Forces, Alaska, APO 98749

- 1. In accordance with preceding 3rd indorsement, the existing sections of surface laid and self-buried pipeline will be removed and negotiations initiated with the contractor to transfer the cutout section of the pipeline to the contractor as surplus. Connected flanges, fittings, including stopple fitting assemblies, will also be transferred as surplus, in accordance with verbal instructions received from representatives of your office. Existing sections of pipeline buried during former construction work, if approval is granted by Canadian authorities, will be purged and left in the ground.
 - 2. Whether buried steel pipe sections abandoned in place can be successfully used as anodic material to protect sections of the new coated 12-mile section of pipeline, new section of steel pipeline to be the cathode, cannot be determined without this office first making a field reconnaissance and obtaining field potential measurements. The practicality of the proposal to use the abandoned section of buried pipe for anodic material is not assured. This office proposes to make field cathodic protection surveys to obtain the necessary data to determine the practicality. It is proposed to apply impressed direct current to the existing abandoned steel pipe (anodic material). Then the pattern of pipe-to-environmental potential change with flow of cathodic protection current will be measured at numerous points along the two pipelines. It is anticipated that variations in distance between the two pipelines, kinds and conditions of soils and electrolytes may cause problems.
 - 3. In the event that impressed current applied to abandoned buried sections of existing pipeline is proven experimentally to protect the new pipeline, and that it is practical to install and operate the proposed cathodic protection installation, then permanently installed propane fueled thermoelectric direct current generators would be considered for the initial installation. Should electric energy requirements exceed the limited output from available sizes of thermoelectric generators, internal combustion engine driven-type electric generators would be installed. Both kinds of generators could be serviced from existing booster pump stations located at Blanchard River or Haines Junction.
 - 4. After installation, extensive seasonal field testing of the cathodic protection system would be required. Adjustments and new installations

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NPAEN-DB-M (27 Feb 70) 4th Ind

SUBJECT: Salvage of Pipe - Dezadeash Lake Area, Contract DACA85-70-C-0018

must be made of the kinds, and at the times, required to assure adequate protection. The proposed cathodic protection installations would have permanent test stations incorporated into the construction.

- 5. It is recommended that, as a matter of policy, your headquarters provide this office with funds, budgeted on a yearly basis, to seasonally test all installed pipeline cathodic protection installations. As suggested in paragraph one of the basic, this office will prepare a cathodic protection project for the new 12-mile. section of 8-inch pipeline in the Dezadeash area. It will provide for making the initial installation and thereafter performance of the seasonal field testing. The field testing is an essential operating and maintenance requirement. Performance of field testing is necessary to assure adequate and continuous operation of all existing cathodic protection installations.
- 6. The contractor has been instructed to reduce the quantity of alcohol to be supplied for purging from 15,000 to 10,000 gallons.
- 7. Any cost reductions proposed by the contractor, as a result of the used surplus pipe being offered to the contractor and other changes resulting from reduction in scope of work, will be furnished to your headquarters for concurrence prior to finalizing the negotiations.

FOR THE DISTRICT ENGINEER:

1 Incl

Copies furnished: DB-AR AE Anchorage DB-M WARREN GEORGE Chief, Engineering Division 6 May 70
ENGR
Tackes
Norman
F. Anderson
Hendrickon

Effe 6 mg 7 0 Mr. Kreitlow/mk/753-4110
OREC: Engr Div

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