

Mr. Fegan/nds/71149

INFO

8 April 1954

**SUBJECT:** Request for Authority to Observe Alaskan Pipeline Construction Techniques

**TO:** Division Engineer  
North Pacific Division  
Corps of Engineers, U. S. Army  
Portland, Oregon

1. Inclosed herewith is copy of letter received from Engineer Research and Development Laboratories, Fort Belvoir, Pa., which is self explanatory.

2. It is requested that specific remarks and recommendations be made with respect to paragraphs 2, 3, 4, 5, 6 and 7.

3. Expeditions reply would be appreciated since the proposed visits, if authorized, would begin on or about 15 May 1954.

BY ORDER OF SAJCH COUNCIL SECRETARY:

1 Incl  
by ltr to HQDL  
18 Mar 54

H. B. ZACKERSTEIN  
Chief, Engineering Division  
Military Construction

GRAMM

ENGINEER

8 April 1954

Collins Manufacturing Co.  
2697 Chapsen Street  
Oakland 1, California

ATTENTION: Mr. Arthur Collins:

Gentlemen:

Further reference is made to your communication of 8 March 1954, protesting the elimination of the use of Cobalt 60 as a radioactive source in the inspection of the welding on the pipeline which the Corps of Engineers is building from Haines to Fairbanks, Alaska.

The District Engineer, Alaska District, considered it essential that he employ a consultant possessing the broadest possible specialized experience in that field. After careful consideration, he selected Mr. A. G. Barkow of the Natural Gas Pipeline Company of America as consultant for the project.

The District Engineer's decision that Iridium 192 is the preferable radioactive source to be used in the inspection of this pipeline was based on Mr. Barkow's recommendation, which was in turn based upon Mr. Barkow's view from long experience that Iridium 192 was the only radioisotope available which would produce the film definition necessary to insure the superior results required on this job. This decision was made particularly in view of the expectation that a fine cracking condition in the welding was expected to be encountered because of climatic influences in that region, a factor which ruled out the use of radioactive sources other than those which, because of their longer wave lengths, would provide the maximum clarity and definition. This necessarily ruled out Cobalt 60, which has a very short wave length.

It may be of interest to know that the District Engineer has received several expressions of affirmation of the superiority of Iridium 192 over Cobalt 60 from prominent American industrial and engineering sources and also from the British Columbia Research Council.

ENKMU  
Collins Manufacturing Co.

Mr. Maschke/ade/71149  
8 April 1954

From the foregoing it is hoped that the information furnished will provide a better understanding of the actions taken by the Corps of Engineers to protect the Government's interests on this highly specialized project.

Sincerely yours,

G. A. FINLEY  
Colonel, Corps of Engineers  
Asst for Planning, Engr & Contracts  
Military Construction

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