NATIONAL TRANSPORTATION SAFETY BOARD WASHINGTON, D.C.

ISSUED: December 13, 1977

Forwarded to:

Mr. Edward L. Patton Chairman Alyeska Pipeline Service Company 1835 S. Bragaw Anchorage, Alaska 99504

SAFETY RECOMMENDATION(S)

Since the startup of the Alaska pipeline on June 20, 1977, to August 15, 1977, seven incidents and accidents have caused the pipeline to be shut down periodically. An accident on July 8, 1977, in which Pump Station No. 8 was destroyed and one person was killed, resulted from the failure of the pump station personnel to follow Alyeska Pipeline Service Company (Alyeska) operating procedures. Another accident on August 15, 1977, in which crude oil spilled and could have ignited in Pump Station No. 9, also resulted from the failure of pump station personnel to follow company procedures.

The unique topography of this pipeline system is such that Pump Stations No. 8 and 10 or Pump Stations No. 9 and 10 must be operating to transport the crude oil to Valdez, Alaska. If Pump Station No. 9 had been destroyed on August 15 as Pump Station No. 8 was earlier, the entire pipeline system would have been shut down indefinitely. This would have resulted in a loss of crude oil to refineries and would have created the potential for crude oil solidification in the pipeline.

The National Transportation Safety Board issued two recommendations (P-77-16 and 17) concerning the July 8 accident on July 15, 1977. The Board recommended that Alyeska review all pump station startup procedures for inadequacies and designate a manager at each pump station who would require that all personnel comply with the procedures. The Board issued three additional recommendations on September 9, 1977, to correct certain design and operating deficiencies in the pump rooms of each station. The recommended actions, if taken earlier at Alyeska's own initiative, could have prevented the accident on August 15 at Pump Station No. 9.

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Alyeska, in its response to the Board's recommendations, initiated a study of possible changes in pump control locations in early July and has carried the study a step further to include all booster pumps and the Pump Station 5 injection pumps as well as the main line pumps. However, because of the continuing occurrence of accidents and particularly because of the August 15, 1977, accident at Pump Station No. 9, a critical station on this system, the National Transportation Safety Board recommends that the Alyeska Pipeline Service Company:

Review its training program for adequacy, reinstruct its personnel in the procedures contained therein, and monitor the employees to assure their compliance with the required standards of safety for pipeline operation. (Class II, Priority Action)(P-77-37)

BAILEY, Acting Chairman, McADAMS, HOGUE, and KING, Members, concurred in the above recommendation.

By: Kay Bailey

Acting Chairman

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