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National Transportation Safety Board

Washington, D.C. 20594

Safety Recommendation

Date: October 1, 1990

In reply refer to: M-90-60

Mr. Davis Allen President Zapata Haynie Corporation P.O. Box 2868 Hammond, Louisiana 70404

On October 3, 1989, the United States fishing vessel NORTHUMBERLAND struck and ruptured a 16-inch-diameter natural gas transmission pipeline about 1/2 nautical mile offshore in the Gulf of Mexico, and about 5 1/3 nautical miles west of the jetties at the entrance to Sabine Pass, Texas. Natural gas under a pressure of 835 psig was released. An undetermined source on board the vessel ignited the gas, and within seconds, the entire vessel was engulfed in flames. The fire on the vessel burned itself out on October 4. Leaking gas from the pipeline also continued to burn until October 4. Of the 14 crewmembers, 11 died as a result of the accident.

Although the pipeline was supposed to have been buried at the time of construction (in 1973), postaccident diving surveys determined that the pipeline was unburied when it was struck by the NORTHUMBERLAND. The Safety Board is concerned that other pipelines in shallow waters of the Gulf of Mexico may also be unburied.

The Safety Board's investigation of the accident indicated that the master apparently had no specific knowledge of the presence and location of submerged pipelines in the areas in which he had worked and was familiar. Although he was aware that submerged pipelines existed in the Gulf of Mexico, he believed that all submerged pipelines were buried beneath the seabed and were required to be maintained in that condition.

Zapata's management also believed that submerged pipelines were buried and maintained in that condition. As a result, the company did not train its vessel masters about the potential dangers of submerged pipelines and did not have any policies regarding the operation of its vessels near submerged pipelines. Based on his training and experience, the master consequently had no reason to be concerned about submerged pipelines. Because of the

¹ Additional information is given in the accident report. (National Transportation Safety Board. 1990. Fire on board the F/V NORTHUMBERLAND and rupture of a natural gas transmission pipeline in the Gulf of Mexico near Sabine Pass, Texas, October 3, 1989. Pipeline Accident Report NTSB/PAR-90/02. Washington, DC.)

uncertainty about the actual burial condition of submerged pipelines in the Gulf of Mexico, the Safety Board believes that marine operators should be made aware that submerged pipelines may be unburied and pose a hazard to their vessels and crews when the vessels are in depths of water comparable to their drafts. Therefore, the Safety Board urges Zapata to develop and implement a program to train its vessel masters about the potential dangers of exposed pipelines and the precautions masters can take when operating the vessels in shallow water.

Therefore, as a result of this accident, the National Transportation Safety Board recommends that Zapata Haynie Corporation:

Develop and implement a program to train the company's masters about the danger from exposed pipelines in shallow waters, and the precautions a master can take when operating vessels in shallow waters. (Class II, Priority Action) (M-90-60)

Also as a result of its investigation, the Safety Board issued recommendations to the Natural Gas Pipeline Company of America, U.S. Department of Transportation, Research and Special Programs Administration, U.S. Coast Guard, U.S. Department of the Interior, Minerals Management Service, U.S. Army Corps of Engineers, National Oceanic and Atmospheric Administration, Interstate Natural Gas Association of America, the American Gas Association, American Public Gas Association, American Petroleum Institute, National Fish Meal and Oil Association, Louisiana Shrimp Association, and National Council of Fishing Vessel Safety and Insurance.

The National Transportation Safety Board is an independent Federal agency with the statutory responsibility "...to promote transportation safety by conducting independent accident investigations and by formulating safety improvement recommendations" (Public Law 93-633). The Safety Board is vitally interested in any actions taken as a result of its safety recommendations and would appreciate a response from you regarding action taken or contemplated with respect to the recommendation in this letter. Please refer to Safety Recommendation M-90-60 in your reply.

KOLSTAD, Chairman, COUGHLIN, Vice Chairman, LAUBER, BURNETT, and HART, Members, concurred in this recommendation.

James L. Kolstad

Chairman