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RECOMMENDATION

On the basis of this study, the National Transportation Safety Board recommends that:

The Office of Pipeline Safety of the Department of Transportation conduct a study to develop standards for the rapid shutdown of failed natural gas pipelines and work in conjunction with the Federal Railroad Administration to develop similar standards for liquid pipelines.

The purpose of the rapid shutdown is to reduce the amount of hazardous materials released, and any method which will quickly reduce the amount released should be considered.

The degree of security provided by the standards should also consider the relative hazard of the commodity, the size of the population-at-risk at points along the pipelines, and the potential damaging effects on property and the environment. Two special factors concerning the population-at-risk should be taken into account; namely, (1) that the population is often unaware of the hazard, and therefore unable to ascape it or guard against it, and (2) that in many situations the risk is concentrated in a relatively small proportion of the population near pipelines in order to achieve benefits for the remainder of the population. The risk to those near pipelines should not be appreciably higher than the risk to the remainder of the population. A substantially greater degree of security for those near pipelines should be provided than would be indicated by requiring that the cost of the safety measures be justified entirely by the lives to be saved.

BY THE NATIONAL TRANSPORTATION SAFETY BOARD:

/s/	Chairman
/s/	OSCAR M. LAUREL Member
/s/	FRANCIS H. McADAMS Member
/s/	LOUIS M. THAYER Member
/s/	ISABEL A. BURGESS Member

December 30, 1970.