

NATIONAL TRANSPORTATION SAFETY BOARD  
WASHINGTON, D.C.

ISSUED: December 29, 1978

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Forwarded to:

Dr. Eula Bingham  
Assistant Secretary for Occupational  
Safety and Health  
Department of Labor  
200 Constitution Avenue, N.W.  
Washington, D.C. 20210  
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SAFETY RECOMMENDATION(S)

P-78-79

At 1:30 p.m., c.d.t., on June 12, 1978, a 10-inch natural gas pipeline owned by the Gas Service Company was struck and ruptured by excavation equipment during construction of a sewer in Kansas City, Missouri. The natural gas, at more than 110-psig pressure, escaped from a 5-inch-long hole in the pipeline. At 3:15 p.m., the gas ignited while two gas company employees were cleaning the pipe with hand tools before installing a pipe repair clamp. Both men were burned seriously. 1/

Both men were wearing safety goggles and hard hats at the time of the accident. One of the men was wearing a short-sleeve uniform shirt and trousers made of polyester material. The other worker was wearing cotton pants and a long-sleeve cotton shirt. Both men received second- and third-degree burns over 60 percent of their bodies. However, the man with the polyester uniform was burned more severely.

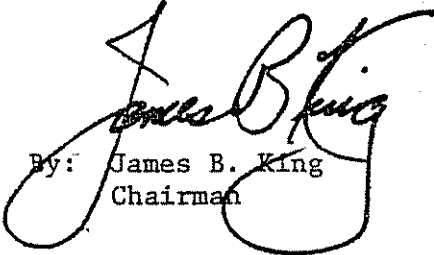
Although the hard hats and safety goggles did provide some burn protection and possibly saved the vision of the injured men, a hood and flame-resistant coveralls and gloves, which are not currently required by Federal regulations, would have provided more protection. Polyester work clothing should be banned for all gas company employees working around blowing gas where ignition could occur and set their clothes on fire. In this accident, the worker wearing the short-sleeve polyester work uniform supplied by the company was burned more severely -- even though his flaming clothes were extinguished with a fire extinguisher -- than the worker who wore cotton clothing, including a long-sleeve shirt.

1/ For more detailed information read "Pipeline Accident Report -- The Gas Service Company Natural Gas Pipeline Rupture and Fire, Kansas City, Missouri, June 12, 1978" (NTSB-PAR-78-5).

Therefore, the National Transportation Safety Board recommends that the Occupational Safety and Health Administration of the U.S. Department of Labor:

Establish standards for gas industry safety clothing to protect workers repairing leaking gas pipelines where ignition of the gas could cause serious burns. (Class III, Longer Term Action) (P-78-79)

KING, Chairman, DRIVER, Vice Chairman, McADAMS and HOGUE, Members, concurred in the above recommendation.



By: James B. King  
Chairman