

NATIONAL TRANSPORTATION SAFETY BOARD  
WASHINGTON, D.C.

ISSUED: February 29, 1976

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Forwarded to:

Mr. William L. Hutchison  
President  
Texas Oil & Gas Corporation  
2700 Fidelity Union Tower  
Dallas, Texas 75201  
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SAFETY RECOMMENDATION(S)

P-76-6 through 9

At 9:45 p.m. on May 21, 1974, a 6-inch gas-gathering pipeline, owned by the Texas Oil and Gas Corporation, ruptured at the edge of a rural road south of Meridian, Mississippi. Three vehicles entered the area which contained the escaping gas and stalled near the rupture. The gas ignited at 10:05 p.m., and five persons died as a result. Three vehicles were destroyed and 40 acres of woodland were burned.

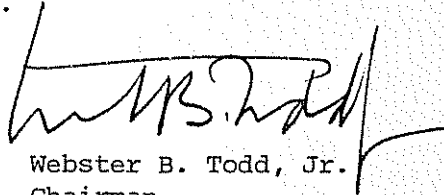
Although less than 4 years old, the 6-inch pipe had corroded internally and had been embrittled by hydrogen. The pipeline operator had not detected the corrosion although some corrosion test coupons had been installed. The pipeline had not been scraped internally often enough; consequently, liquids accumulated in the bottom of the pipe. The pipe ruptured at 300 psig - - well below its specified minimum yield strength - - at a weak point thinned by internal corrosion and further weakened by hydrogen embrittlement.

Therefore, the National Transportation Safety Board recommends that the Texas Oil and Gas Corporation:

- (1) (a) Establish a periodic scraper program and install appropriate hydrogen probes, test coupons, resistance probes, or other testing equipment at strategic locations to identify and locate internal corrosion problems, (b) examine the test equipment and analyze the scraper residues carefully at regular time intervals to monitor the internal condition of the lines, and (c) take necessary action to repair deficiencies found in the pipes and to improve operational procedures for the prevention of corrosion and hydrogen embrittlement. (P-76-6) (Class I, Urgent Followup)

- (2) Determine the correct frequency, types, and amounts of inhibitor and the proper injection points so that further internal corrosion can be deterred. (P-76-7) (Class I, Urgent Followup)
- (3) Instruct its employees on the importance of proper operation and maintenance of scrubbers and separators to prevent water from entering the pipelines. (P-76-8) (Class I, Urgent Followup)
- (4) Install pipe used in the construction or repair of its gathering lines with the longitudinal seam on the top half of the pipe. (P-76-9) (Class III, Longer Term Followup)

REED, Acting Chairman, McADAMS, THAYER, BURGESS, and HALEY, Members, concurred in the above recommendations.



By: Webster B. Todd, Jr.  
Chairman

NATIONAL TRANSPORTATION SAFETY BOARD  
WASHINGTON, D.C. 20594

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