



# National Transportation Safety Board

Washington, D. C. 20594

Safety Recommendation

*Log P-291C*

Date: November 21, 1988

In reply refer to: P-88-13

Ms. M. Cynthia Douglass  
Administrator  
Research and Special Programs Administration  
U.S. Department of Transportation  
Washington, D.C. 20590

On January 18, 1988, a natural gas explosion destroyed the building housing the K&W Cafeteria and the lobby of the Sheraton Motor Inn at 380 Knollwood Street, Winston-Salem, North Carolina. Two adjoining motel wings suffered structural damage. Of the four persons in the lobby/cafe building at the time of the explosion, three sustained minor injuries. The fourth person sustained a fractured ankle. One motel guest also sustained minor cuts but refused treatment.<sup>1</sup>

The North Carolina Utilities Commission (NCUC) and the Office of Pipeline Safety (OPS) of the Research and Special Programs Administration (RSPA) of the U.S. Department of Transportation (DOT) have not taken sufficient enforcement actions against the Piedmont Natural Gas Company (Piedmont) to ensure its compliance with the corrosion protection and telephonic notification requirements. When the Federal safety standards for gas pipelines became effective in 1971, operators were given 5 years to place pipelines in areas of active corrosion under cathodic protection. The NCUC properly took action in the early 1970s to review the corrosion protection plans for the operators in the State. However, the NCUC failed to advise Piedmont in a timely manner of the inadequacies in its corrosion plan, and this left the company in a difficult position. Although Piedmont learned that its plan did not meet the intent of the regulations slightly less than a year before the compliance date, the NCUC assessed a \$1,000 penalty against Piedmont for failure to designate areas of active corrosion on pipelines installed before August 1, 1971, and failure to place these pipelines under cathodic protection by August 1, 1976. Despite the NCUC assessment against Piedmont in 1977, Piedmont still had not satisfied the corrosion protection requirements when the accident occurred. More than 8 years had passed from the detection of the first corrosion leak on the distribution line along Knollwood Street until it was completely under cathodic protection by March 1988. The detection of a second leak in 1984 apparently did not

<sup>1</sup>For more detailed information, read Pipeline Accident Report--*Piedmont Natural Gas Company, Natural Gas Explosion and Fire, Winston-Salem, North Carolina, January 18, 1988* (NTSB/PAR-88/01).

cause Piedmont to reassess its priorities to place the distribution line under cathodic protection more promptly. Recognizing that nearly 12 years had passed since the initial deadline for compliance with these requirements, the Safety Board does not believe that Piedmont has made an adequate effort to comply with the corrosion protection requirements.

The NCUC, knowing the historical problems Piedmont has had with complying with corrosion protection standards, should have continued to monitor its progress closely beyond 1979. Although the NCUC noted in its inspection reports for 1986 and 1987 of the Winston-Salem district that Piedmont had not complied with the corrosion protection requirements for all of its pipeline, the NCUC has taken no subsequent enforcement action. As a result, Piedmont has not been motivated to comply with the corrosion protection regulations in a timely manner.

Piedmont also failed to comply with the telephonic notification requirements for this accident. In response to the OPS notice of probable violation and proposed civil penalty, Piedmont claimed that it had made a good faith effort to comply with the regulations. Based on the investigation of the fire marshal and the advice given by the NCUC section chief regarding the notification of the DOT, Piedmont contended the penalty was not justified.

The decision of the OPS to close the case was apparently made after the chief of the southern regional office had verified with the NCUC section chief that Piedmont had been told that it was not necessary to notify the DOT. The OPS decision to close the case on these grounds appears to circumvent the OPS longstanding policy to pipeline operators to provide telephonic notification if there is reason to believe that gas is involved. The lack of documentation in the OPS case file also demonstrates that the OPS did not conduct a thorough investigation. While the OPS did verify that the NCUC section chief had told Piedmont that it was not necessary to contact the DOT, the OPS case file does not indicate that the OPS interviewed any Piedmont officials regarding the company's notification procedures, or that the OPS contacted other sources, such as the Winston-Salem fire marshal or the Safety Board, for information. Consequently, the Safety Board believes that the OPS not only failed to aggressively pursue this case with Piedmont to determine when Piedmont should have first suspected natural gas might be involved but also ignored its own policy to operators for providing telephonic notification.

The problem with operator compliance and DOT enforcement of the telephonic notification requirements is not new. As a result of its investigation of a gas explosion in Monongahela, Pennsylvania, on March 13, 1977, the Safety Board recommended that the Materials Transportation Bureau (MTB) of the DOT:

P-77-15

Enforce the notification requirements as stated in 49 CFR 191.5 in view of the continuing noncompliance of pipeline operators.

Along with the recommendation, the Board also referenced 12 other accidents that were investigated from January to July 1977 in which operators were late in providing notification. The MTB's response in December 1977 indicated that enforcement actions were initiated in 7 of the 12 cases referenced by the Board. The MTB also stated that it would continue to review telephonic reports for compliance, determine if more definitive requirements were needed, and clarify the intent of the existing requirements through its advisory bulletins to operators and industry

associations. The Board classified Safety Recommendation P-77-15 as "Closed--Acceptable Action."

As a result of the posture of both the NCUC and the OPS in these instances, there is little reason for pipeline operators to be concerned about the possibility of strong sanctions for failing to comply with Federal regulations. Consequently, a pipeline operator may be more inclined to ignore those regulations that it finds costly or inconvenient. The Safety Board has previously addressed this issue in its investigation of the pipeline rupture in Mounds View, Minnesota,<sup>2</sup> by stating:

The manner in which the OPS has used its sanctions has been insufficient to motivate compliance with pipeline safety regulations. For any regulatory program to be effective, it must have and use sanctions designed to motivate compliance.

Consequently, the Safety Board recommended that the OPS:

P-87-21

Increase the use of sanctions which reflect the gravity of the violation and the operator's compliance history as a means for motivating operator compliance with Federal pipeline safety standards.

On May 9, 1988, the RSPA responded to the Board's recommendation and indicated that it had reviewed its Part 190 enforcement procedures and had requested that Congress amend the limitations on civil penalties. The Board believes that the RSPA currently has the authority to fit proper and reasonable sanctions to violations, and the Board is concerned that the RSPA's use of existing authority could be more aggressive. In urging the RSPA to look further at its ability to levy sanctions as the violations warrant, the Board classified Safety Recommendation P-87-21 as "Open--Unacceptable Action."

Since the NCUC has been certified by the DOT to enforce the gas pipeline safety regulations within North Carolina, the DOT has the responsibility to ensure that certified State agencies are using enforcement authority effectively in obtaining compliance with Federal safety standards. Therefore, the Safety Board urges the RSPA to reconsider its position on Safety Recommendation P-87-21.

Although the Pipeline Safety Section of the Transportation Division of the NCUC appears to have sufficient staff to inspect and monitor normal pipeline operations in the State of North Carolina, the Safety Board is concerned that NCUC inspectors are working at their maximum capabilities. However, any unanticipated situation, such as a major accident investigation workload, that removes an inspector from his assigned field work will adversely affect the pipeline safety program. Consequently, the NCUC should reevaluate the staffing levels of the Pipeline Safety Section not only on the basis of normal inspection activities, but also on the basis of other activities, such as investigations, training, and special enforcement actions requiring additional monitoring of an operator.

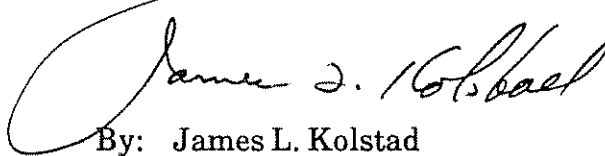
<sup>2</sup>Pipeline Accident Report--*Williams Pipeline Company, Liquid Pipeline Rupture and Fire, Mounds View, Minnesota, July 8, 1986* (NTSB/PAR-87/02).

Therefore, the National Transportation Safety Board recommends that the Research and Special Programs Administration:

Monitor the staffing levels of the certified State pipeline inspection agencies, and require staffing level increases sufficient to respond to responsibilities beyond programmed inspection activities. (Class II, Priority Action) (P-88-13)

Also, as a result of its investigation, the Safety Board issued Safety Recommendations P-88-4 through -9 to the Piedmont Natural Gas Company; P-88-10 to the city of Winston-Salem, North Carolina; P-88-11 and -12 to the North Carolina Utilities Commission; and P-88-14 to the American Gas Association.

KOLSTAD, Acting Chairman, and BURNETT, LAUBER, NALL, and DICKINSON, Members, concurred in this recommendation.



By: James L. Kolstad  
Acting Chairman