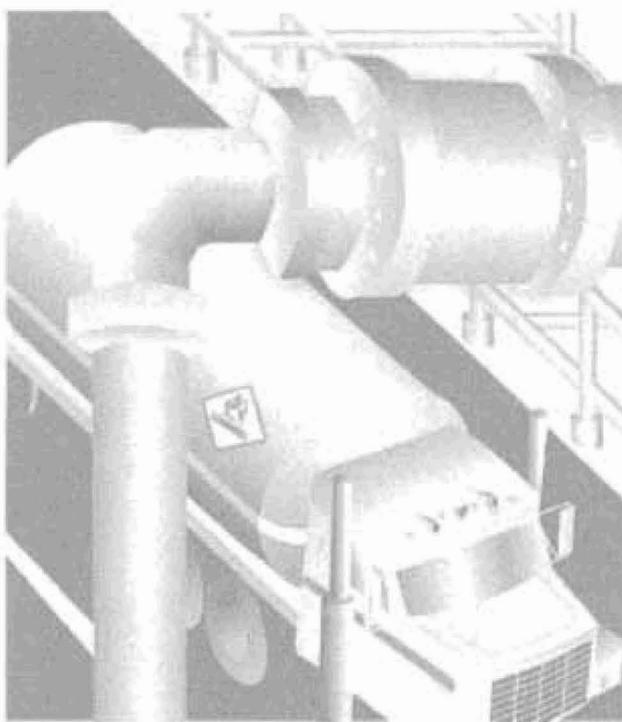


**Rupture of Enbridge Pipeline and Release of Crude Oil
near Cohasset, Minnesota
July 4, 2002**



Pipeline Accident Report

NTSB/PAR-04/01

PB2004-916501

Notation 7514A

WEB Exhibit # 21

Pipeline Accident Report

**Rupture of Enbridge Pipeline and Release of
Crude Oil near Cohasset, Minnesota
July 4, 2002**

WEB Exhibit # 21 A

**NTSB/PAR-04/01
PB2004-916501
Notation 7514A
Adopted June 23, 2004**

**National Transportation Safety Board
490 L'Enfant Plaza, S.W.
Washington, D.C. 20594**

BY THE NATIONAL TRANSPORTATION SAFETY BOARD

MARK V. ROSENKER
Vice Chairman

JOHN J. GOGLIA
Member

CAROL J. CARMODY
Member

RICHARD F. HEALING
Member

Adopted: June 23, 2004

WEB Exhibit # 21B

Chairman Ellen Engleman Conners did not participate in the adoption of this report.

Executive Summary

About 2:12 a.m., central daylight time, on July 4, 2002, a 34-inch-diameter steel pipeline owned and operated by Enbridge Pipelines, LLC ruptured in a marsh west of Cohasset, Minnesota. Approximately 6,000 barrels (252,000 gallons) of crude oil were released from the pipeline as a result of the rupture. The cost of the accident was reported to the Research and Special Programs Administration Office of Pipeline Safety to be approximately \$5.6 million. No deaths or injuries resulted from the release.

The National Transportation Safety Board determines that the probable cause of the July 4, 2002, pipeline rupture near Cohasset, Minnesota, was inadequate loading of the pipe for transportation that allowed a fatigue crack to initiate along the seam of the longitudinal weld during transit. After the pipe was installed, the fatigue crack grew with pressure cycle stresses until the crack reached a critical size and the pipe ruptured.

The following safety issues were identified during this investigation:

- The effectiveness and application of line pipe transportation standards.
- The adequacy of Federal requirements for pipeline integrity management programs.

As a result of its investigation of this accident, the Safety Board issues safety recommendations to the Research and Special Programs Administration, the American Society of Mechanical Engineers, and the American Petroleum Institute.