## NATIONAL TRANSPORTATION SAFETY BOARD WASHINGTON, D.C.

ISSUED: September 29, 1978

Forwarded to:

Honorable Thomas Bradshaw, Jr. Secretary North Carolina Department of Transportation P. O. Box 25201 Raleigh, North Carolina 27611

SAFETY RECOMMENDATION(S)

H-78-67 and 68

About 10:00 a.m., on January 25, 1978, a Kohler Company tractor-semitrailer, carrying a 43,000-lb cargo, was southbound on North Carolina Route 226 and descending a steep grade, when all braking capability was lost. The operator, who intended to stop the truck by scraping it against a vertical cut, steered into the northbound lanes at a blind curve and struck a northbound pickup truck headon. A passenger in the pickup truck was killed, and both drivers and a second passenger in the pickup truck were injured. The Safety Board's investigation revealed that the tractor-semitrailer brakes were not properly adjusted, and braking capability was lost on the downhill grade. 1/

Although roadway conditions at the accident site did not contribute to the crash, the following deficiences were noted:

- (a) The single "W" beam guardrail, which borders the outside circumference of the left curve, varies in height from 1 foot to 2 feet above the road and does not meet the American Association of State Highway and Transportation Officials (AASHTO) recommended minimum height of 27 inches. At its low point, which is at the center section of the curve, the existing guardrail offers little retention protection to an intruding vehicle.
- (b) White pavement edge lines at the site were obliterated by an accumulation of dirt; thus, their value as a visual reference for drivers has been lost. Also, the accumulation of dirt may have reduced the road surface drag factor at this location. (Highway Safety Program Manual Standard No. 12, Highway Design, Construction, and Maintenance.)

<sup>1/</sup> For more detailed information read "Kohler Company Tractor-Semitrailer/Pickup Truck Collision, U.S. Route 226, Near Marion, North Carolina, January 25, 1978." The report will be available after October 15, 1978.

Therefore, the National Transportation Safety Board recommends that the State of North Carolina:

Upgrade State guardrail installations at this location to conform with current AASHTO and FHWA design and performance standards. (Class II, Priority Action) (H-78-67)

Maintain edge line markings at this location by clearing debris from the pavement surface as recommended by Highway Safety Program Manual Standard No. 12, Chapter 4. (Class I, Urgent Action) (H-78-68)

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

: James B. King

/Chairman