

National Transportation Safety Board

Washington, D.C. 20594

Safety Recommendation

Date: July 29, 1999

In reply refer to: R-99-30

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On March 25, 1998, about 4:48 a.m. eastern standard time, southbound Norfolk Southern Corporation (Norfolk Southern) train 255L5, which was en route to Fort Wayne, Indiana, struck eastbound Consolidated Rail Corporation (Conrail) train TV 220, which was en route to Columbus, Ohio. The collision occurred where the Norfolk Southern Huntington District and the Conrail Chicago main lines cross at grade at the east end of the town of Butler, Indiana. Both locomotives and five cars from the Norfolk Southern train derailed, and three cars from the Conrail train, two with multiple stacked platforms, derailed. The Norfolk Southern conductor was killed; the engineer and student engineer sustained minor injuries. The two Conrail crewmembers were not injured.

No hazardous materials were released, but both Norfolk Southern locomotive fuel tanks ruptured and released approximately 7,000 gallons of fuel oil. Norfolk Southern estimated total damages of \$264,000 (\$187,000 to equipment, \$18,000 to track and signals, and \$59,000 to cargo). Conrail estimated total damages of \$352,200 (\$314,000 to equipment, \$33,500 to track and signals, and \$4,700 to cargo).

The National Transportation Safety Board determined that the probable cause of this accident was the failure of the engineer and conductor of train 255L5 to comply with operating rules (specifically, their failure to observe and confirm signal aspects and their failure to continuously and directly supervise the student engineer) and the failure of Norfolk Southern Corporation to ensure employees' compliance with operating rules. Contributing to the accident was Norfolk Southern Corporation's failure to ensure that its locomotive engineer training program provided effective, timely training; oversight; and feedback to ensure that students were adequately prepared for operational situations. Also contributing to the probability of this

For additional information, read Railroad Accident Report—Collision of Norfolk Southern Corporation Train 255L5 With Consolidated Rail Corporation Train TV 220 in Butler, Indiana, on March 25, 1998 (NTSB/RAR-99/02).

accident occurring was the failure of Norfolk Southern Corporation's signal maintenance program to respond to a reported signal deficiency.

An additional concern identified during the accident investigation involved the identification and emergency response management of hazardous materials. Because a white powder that had been spilled by the Norfolk Southern train as a result of the collision was potentially hazardous, the DeKalb County Hazardous Materials Response Plan was initially activated for a level 3 response, resulting in two schools being closed.

When the two surviving Norfolk Southern crewmembers were unable to furnish the Butler fire department with a train consist listing the materials transported on the Norfolk Southern train, emergency responders donned self-contained breathing apparatus to collect information from one of the broken bags of white powder. The fire chief then attempted to contact the manufacturer. Because the accident occurred during nonbusiness hours, a cleaning person answered the telephone and provided the name of the only chemical manufactured by the company, nepheline syenite. (The cleaning person's information was later confirmed by company personnel during business hours.) The fire chief contacted CHEMTREC (Chemical Transportation Emergency Center), which confirmed that nepheline syenite is not a hazardous material. After about an hour, when the white powder had been identified as a nonhazardous material, the incident was downgraded to a level 2 response because of the diesel fuel on the ground.

The Safety Board has long been concerned about the emergency response management of railroad accidents involving hazardous materials. The Board, in its 1991 safety study² on transporting hazardous materials by rail, discussed how the lack of coordination between the railroads and communities on emergency response planning had presented major safety problems in nine accidents and incidents investigated between 1977 and 1987. The Safety Board subsequently issued the following recommendation to the Class I railroads:

R-91-15

Develop, implement, and keep current, in coordination with communities adjacent to your railroad yards and along your hazardous materials routes, written emergency response plans and procedures for handling releases of hazardous materials. The procedures should address, at a minimum, key railroad personnel and means of contact, procedures to identify the hazardous materials being transported, identification of resources for technical assistance that may be needed during the response effort, procedures for coordination of activities between railroad and emergency response personnel, and the conduct of disaster drills or other appropriate methods to test emergency response plans.

² Safety Study—Transport of Hazardous Materials by Rail (NTSB/SS-91/01).

In December 1991, the Safety Board classified Safety Recommendation R-91-15 "Closed—Acceptable Action," based upon Norfolk Southern's initial response in July 1991 and subsequent November 1, 1991, letter that emergency response procedures had been developed and were being implemented. The November 1, 1991, letter noted that Norfolk Southern directs its emergency response coordination efforts toward all of the communities along its service routes, not just those with rail yards, to include sharing hazardous material response plans with localities, providing training for the smaller cities and towns along its routes, and providing personnel to serve on local emergency planning committees.

However, according to the Norfolk Southern Lake Division Supervisor, DeKalb County was not on the list of communities trained recently by Norfolk Southern in emergency response coordination. In this accident, local officials did not attempt to contact the railroad for assistance beyond asking the surviving Norfolk Southern crewmembers what substance the Norfolk Southern train carried. The company's lack of coordination with the community resulted in emergency response personnel taking an hour to identify a potentially hazardous substance and in two schools being closed unnecessarily. The Safety Board concluded that better coordination by Norfolk Southern with DeKalb County may have prevented the delay in identifying the possibly hazardous material transported on the Norfolk Southern train.

In the Safety Board's opinion, such a situation is unacceptable, considering that more than 7 years have passed since Norfolk Southern stated it would coordinate emergency response plans with the communities along its service routes. The Safety Board is concerned that other communities may be exposed to similar risks from hazardous material releases and other rail emergencies because Norfolk Southern has not followed through on emergency response coordination. Therefore, in addition to requesting that Norfolk Southern Corporation follow through on the Safety Board's 1991 recommendation, the Safety Board also recommends that the DeKalb County Emergency Management Agency:

Contact Norfolk Southern Lake Division officials to provide and keep current, points of contact for emergency response coordination. (R-99-30)

The Safety Board also issued recommendations to the Federal Railroad Administration, Norfolk Southern Corporation, the Class I railroads and Amtrak, the American Short Line and Regional Railroad Association, the Brotherhood of Locomotive Engineers, the United Transportation Union, and Harmon Industries.

The National Transportation Safety Board is an independent Federal agency with the statutory responsibility "to promote transportation safety by conducting independent accident investigations and by formulating safety improvement recommendations" (Public Law 93-633). The Safety Board is vitally interested in any action taken as a result of its safety recommendations. Therefore, it would appreciate a response from you within 90 days regarding action taken or contemplated with respect to the recommendation in this letter. Please refer to Safety Recommendation R-99-30 in your reply. If you need additional information, you may call (202) 314-6435.

Chairman HALL, Vice Chairman FRANCIS, and Members HAMMERSCHMIDT, GOGLIA, and BLACK concurred in this recommendation.

By: Jim Hall

Chairman