

National Transportation Safety Board

Washington, D.C. 20594

Safety Recommendation

Date: August 12, 1998

In Reply Refer To: R-98-46

Mr. Curtis Wiley Commissioner Indiana Department of Transportation Indiana Government Center North 100 North Senate Avenue, Room N755 Indianapolis, Indiana 46204-2249

At 4:29 a.m., June 18, 1998, the westbound Northern Indiana Commuter Transportation District (NICTD) two-car train 102 struck the second trailer of a long combination vehicle (LCV) that consisted of two flatbed trailers containing a steel coil at the National Steel Corporation's Midwest Steel Division grade crossing near Portage, Indiana. A light fog was present.

The LCV had entered the crossing and proceeded via the northbound lane toward the entrance to the Midwest Steel plant en route to Pre-Coat Metals, a neighboring facility. The LCV had turned off U.S. Highway 12 onto the Midwest Steel grade crossing. The Midwest Steel grade crossing traverses two separate sets of railroad tracks, the NICTD and the Consolidated Railroad Corporation (Conrail) main tracks. The LCV proceeded over the NICTD main tracks and approached the Conrail main tracks. As the LCV was crossing the NICTD tracks, the grade crossing signals for the Conrail track activated and the gates lowered in front of the LCV's tractor. The driver stopped the LCV short of the Conrail south grade crossing gate, which caused his second trailer to stop on the westbound NICTD track as NICTD train 102, traveling westbound about 72 mph, was approaching the Midwest Steel grade crossing. At a point about 542 feet east of the crossing, the traincrew noticed the trailer, which had a black tarp covering the steel coil, on the crossing. The engineer placed the train in emergency braking; then, followed by the conductor, he exited the control compartment and ran down the length of the passenger compartment. The crew alerted passengers about the impending collision and instructed them to evacuate the compartment.

As the collision occurred, NICTD train 102 lifted and tilted the LCV's trailers, breaking the chain that secured the steel coil to the LCV. The released steel coil entered the train car through the control compartment. The coil rolled 35 feet into the train's passenger compartment before coming to rest. Three fatalities and five injuries resulted from the collision.

The maximum authorized track speed for the area in which the collision occurred was 79 mph. No speed restrictions were in effect.

National Transportation Safety Board investigators determined that the two main tracks of the NICTD and Conrail were parallel and separated by 91.5 feet, measured from the centers of the two closest tracks, at the Midwest Steel grade crossing. For the northbound lane that the LCV occupied, the safe storage area between the NICTD and Conrail tracks was about 68 feet at this grade crossing. The tractor-trailer involved in the June 18, 1998, accident was 82 feet long.

The Safety Board is aware that an incident involving a near collision between an Amtrak train and a tractor-trailer occurred on July 15, 1998, at the Wilson Road grade crossing, located east of the Midwest Steel grade crossing. Another incident took place about 6:30 a.m. on July 16, 1998, at the Midwest Steel grade crossing. In this case, the engineer of an eastbound Conrail train traveling at 60 mph noticed that a southbound tractor-trailer had stopped for a westbound NICTD train with its trailer on the Conrail tracks. After blowing the train horn, the engineer placed the train into emergency braking about 100 feet before the crossing. Before the NICTD train arrived at the crossing, the truckdriver pulled forward several feet, enabling the truck to clear the Conrail tracks and avoid a collision. Other near-miss incidents have also been reported.

The Safety Board's investigation of the June 18 NICTD accident is continuing. However, the Safety Board is concerned that in the current configuration, the storage area between the Conrail and NICTD tracks serves as an entrapment area for LCVs and general traffic, including trucks and passenger cars. This configuration may create dangerous situations when trains and traffic commingle. Such situations sometimes result in vehicles becoming entrapped or blocking rail traffic, or both.

The Federal Railroad Administration (FRA), the Federal Highway Administration (FHWA), and INDOT all have a responsibility for the traffic flow over the Midwest Steel and Wilson Road grade crossings. Thus, all three agencies have roles in taking corrective action concerning the commingling of railroad and vehicular traffic at both these grade crossings.

The FRA regulates the aspects of grade crossing safety pertaining specifically to the railroads: track safety, active signals, and train safety and conspicuity. The FHWA regulates aspects of the grade crossing affecting highway safety. It provides guidelines and standards for correct design of grade crossings, assessment of safety at a grade crossing, and appropriate placement of traffic control devices at and on the approach to a grade crossing. The FHWA also administers the distribution of funds authorized in Title 23 United States Code Section 130, which allocates money to the States specifically for the purpose of eliminating hazards at railroad-highway grade crossings. INDOT is responsible for allowing LCVs to traverse the highways of Indiana.

The Safety Board believes that because of the fatal accident and near-miss incidents that have recently occurred, immediate action should be taken to prevent vehicles from becoming entrapped in the storage area between the Conrail and NICTD tracks. The Safety Board further believes that the assignment of a traffic controller physically present at the crossing would be an effective way of mitigating further incidents until permanent changes can be made to the

crossings in question. Therefore, the National Transportation Safety Board makes the following urgent safety recommendation to the Indiana Department of Transportation:

Cooperate with the Federal Railroad Administration, the Federal Highway Administration, and the National Steel Corporation's Midwest Steel Division to take immediate steps to provide traffic controllers to supervise and coordinate the safe movement of highway and railroad traffic at the Midwest Steel and Wilson Road grade crossings. Ensure that the traffic controllers are able to communicate directly with highway and railroad traffic, and keep the controllers assigned to this duty until permanent engineering changes to these grade crossings can be identified and implemented. (Urgent) (R-98-46)

The National Transportation Safety Board is also making urgent safety recommendations concerning this issue to the FRA, the FHWA, and the National Steel Corporation's Midwest Steel Division.

The National Transportation Safety Board is an independent Federal agency with the statutory responsibility "to promote transportation safety by conducting independent accident investigations and formulating safety improvement recommendations" (Public Law 93-633). The Safety Board is interested in any action taken as a result of its safety recommendations. Therefore, it would appreciate a response from you regarding action taken or contemplated with respect to the recommendation in this letter. Please refer to Safety Recommendation R-98-46 in your reply. If you have any questions, you may call (202) 314-6437.

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

