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

ISSUED: July 22, 1985

Forwarded to:

Mr. R. D. Sanborn President and Chief Executive Officer Seaboard System Railroad, Inc. 500 Water Street Jacksonville, Florida 32202

SAFETY RECOMMENDATION(S)

R-85-79 and -80

At 8:50 a.m., on February 5, 1984, 38 cars of Seaboard System Railroad (Seaboard) freight train Extra 8294 North, consisting of 106 cars and a 4-unit locomotive, were derailed at a facing point switch near Clay, Kentucky. The derailment began when a broken truck bolster on the trailing end of the 56th car (SCL boxcar 635204) struck the closure rail of a left-hand turnout and derailed. One of the derailed cars, tank car GATX 94350, contained oleum (fuming sulfuric acid). During the derailment the trailing end of the tank car incurred a 4-inch by 1/8-inch fracture from which a small amount of acid leaked and produced light vapor clouds. A temporary plug was installed to prevent further leakage.

Two days later, as a wreckage-clearing crew contracted by the railroad was preparing to empty the oleum car, the temporary repair plug in the fracture blew out and an estimated 1,800 gallons of oleum was released and vaporized. For the following 24 hours, a 2- by 3-mile area of Bourbon County, Kentucky, was affected, forcing the evacuation of 25 families; 24 residents were treated for minor respiratory complaints. Investigation of the emergency response activities disclosed that the actions taken during this emergency failed to stabilize and reduce the risks to the public health and safety because available technical resources were not used effectively and actions taken were not directly coordinated among responding organizations. Total property damage was \$582,403, including the cost of hazardous materials cleanup. 1/

Two of the traincrew, the brakeman and the conductor, were aware that the tank car containing the oleum was leaking; however, they did not report this fact to Seaboard until ordered to do so by a State policeman, nor did the traincrew comply with the emergency response requirements of Seaboard after the arrival of emergency response None of the crewmembers sought out emergency personnel to provide information from the train documents about materials being transported, the identity of shippers or the guidance included at the end of the train consist for assisting emergency agencies in handling hazardous material emergencies.

<sup>1/</sup> For more detailed information read Hazardous Materials Special Investigation Report--"Release of Oleum During Wreckage-Clearing Following Derailment of Seaboard System Railroad Train Extra 8294 North, Clay, Kentucky, February 5, 1984" (NTSB/SIR-85/01).

Interviews with train crewmembers concerning their actions indicate that they were not aware of the need to coordinate with emergency response agencies or to perform duties other than to document the extent of the wreckage. Even though they had participated in the annual rules classes and had passed the associated tests, they denied knowledge that they had responsibilities concerning public safety or coordination with emergency response agencies.

In a derailment at Colonial Heights, Virginia, on May 31, 1982, another Seaboard traincrew also failed to follow Seaboard postderailment requirements. As a result of its investigation of that derailment, 2/ the Safety Board issued Safety Recommendation R-83-48 to Seaboard on May 24, 1983:

Periodically instruct and test traincrews and supervisory personnel on the procedures for using documents to identify all cars transporting hazardous materials and the information to be provided to assist emergency response personnel.

In its July 24, 1984, response to Safety Recommendation R-83-48, Seaboard stated that it had an ongoing program of training and testing its conductors on the use of pertinent waybill and consist information. Seaboard further stated that it had incorporated into each Division Timetable, which every traincrew is required to have while on duty, special instructions concerning the handling of waybill and other hazardous materials information pertinent to the train consist. Although Safety Recommendation R-83-48 was placed in a "Closed--Acceptable Action" status based on Seaboard's action, the Safety Board noted in its reply on January 11, 1985, that the problem involving traincrew actions during an emergency was found in the investigation of the Clay, Kentucky, accident and a Marshville, North Carolina, accident on April 10, 1984. 3/

Traincrews are the first railroad employees on the scene and must be prepared to act as the first responders in accidents. As such, they must be trained to initiate actions necessary to protect employee and public safety. Moreover, traincrews will have in their possession information essential to the effective handling of hazardous conditions created by derailments by community emergency response agencies. Only through effective, periodic training, testing, and monitoring of all train crewmembers can Seaboard have confidence that its requirements for an emergency situation will be understood and accomplished by its traincrews.

Therefore, the National Transportation Safety Board recommends that the Seaboard System Railroad:

Require its railroad dispatchers to notify local emergency response agencies immediately of a derailment of a train transporting hazardous materials. (Class II, Priority Action) (R-85-79)

Modify its program of periodic training of train service employees to include instructions on the meaning and applications of operating rules applicable to an emergency involving hazardous materials. (Class II, Priority Action) (R-85-80)

<sup>2/</sup> Railroad Accident Report—"Derailment of Seaboard Coast Line Railroad Train No. 120 at Colonial Heights, Virginia, May 31, 1982" (NTSB/RAR-83/04).

<sup>3/</sup> Railroad Accident Report--"Seaboard System Railroad Freight Train FERHL Derailment and Fire, Marshville, North Carolina, April 10, 1984" (NTSB/RAR-85/05).

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 actions taken as a result of its safety recommendations and would appreciate a response from you regarding action taken or contemplated with respect to the recommendations in this letter.

BURNETT, Chairman, GOLDMAN, Vice Chairman, and BURSLEY, Member, concurred in these recommendations.

By: Jim Burnett

Chairman