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NATIONAL TRANSPORTATION SAFETY BOARD WASHINGTON, D.C.

ISSUED: May 24, 1983

Forwarded to:

Mr. Kim Anderson State Coordinator Virginia Office of Emergency Services 310 Turner Road Richmond, Virginia 23225

SAFETY RECOMMENDATION(S)

R-83-52

At 1:25 p.m., on May 31, 1982, northbound Seaboard Coast Line (SCL) freight train No. 120 derailed at the Swift Creek Bridge in Colonial Heights, Virginia, following a hard run in of slack which occurred when the train transited a change in grades. The train was classified as restricted by SCL timetable designation with a maximum authorized speed of 50 mph. The engineer stated the train speed was 45 mph at the time of derailment; however, tests conducted following the accident indicate that the train speed was 64 mph when the train derailed. Cars No. 89 through No. 118 derailed. A tank car was breached in the derailment, and its contents were released and immediately ignited. No crewmembers were injured as a result of the accident, but 12 firefighters and a state emergency official collapsed during firefighting operations. Erroneous and conflicting information concerning hazardous material on the train caused confusion and misdirected emergency response efforts. 1/

The system for handling hazardous materials and other emergencies established by the Commonwealth of Virginia Emergency Services and Disaster Law of 1973, codified at Va. Code Section 44-146.13 et. seq., provides the framework for the effective management of available resources during emergencies. Also, the assignment of overall responsibility to one State agency for providing assistance and training to the various political jurisdictions charged with implementing emergency response preparedness programs should be an effective means for assuring that each jurisdiction's program is adequate to respond to foreseeable emergencies. However, in this accident, several events indicate that additional assistance from the Office of Emergency Services is needed to help the jurisdictions refine their local programs.

Postaccident assessment indicates that information pertinent to the coordination of response actions was in the hands of the Police Department, the Fire Departments, the Virginia Emergency Services specialist, and railroad employees which was not known to the Emergency Services Coordinator (ESC). For example, the ESC was not aware that the Chesterfield Fire Department had communicated with the head-end crew and received a

^{1/} For more detailed information, read Railroad Accident Report—"Derailment of Seaboard Coast Line Railroad Train No. 120, Colonial Heights, Virginia, May 31, 1982," (NTSB/RAR-83/4).

copy of the hazard graph, which the fire department posted on the side of a vehicle close to the command post. In order to effectively coordinate the support of fire, police, and other emergency response units, the ESC must know about the changing conditions and have all current information relating to the emergency. The Safety Board believes that an ESC's role in emergency response actions should be to analyze available information, identify the need for additional data, assess the effectiveness of present actions to control the emergency, and counsel emergency response units and assist them in obtaining additional assistance or information.

In its Special Investigation Report "Onscene Coordination Among Agencies At Hazardous Materials Accidents," 2/ the Safety Board discussed several elements of emergency response actions it believed necessary to successfully respond to hazardous materials emergencies: (1) single command of the accident response, (2) coordination of effort, (3) communications, (4) command post, and (5) control of accident site access. The response to this accident indicates the need for improvement in two of these elements—coordination of effort and control of accident site access.

The Commonwealth of Virginia Emergency Services and Disaster Law of 1973 provides for the designation of Emergency Service Coordinators; however, neither this law nor the State Office of Emergency Services which administers it defines the duties of the ESC. The Safety Board believes that future emergencies in the State of Virginia could be better controlled and managed if the ESC were to be designated as the focal point for all information relating to the emergency.

As a result of its investigation of this accident, the National Transportation Safety Board recommends that the Virginia Office of Emergency Services:

Assist the Town of Colonial Heights and other jurisdictions, as necessary, in improving their emergency response programs for accidents involving hazardous materials, in better defining the responsibilities of the Emergency Services Coordinator for receiving and analyzing response related information and in developing more effective site security procedures. (Class II, Priority Action) (R-83-52)

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 (P.L. 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 McADAMS BURSLEY, and ENGEN, Members, concurred in this recommendation.

Jim Burnett Chairman