

and do not require sufficient information to assess accurately the hazards to the public from various materials.

PROBABLE CAUSE

The National Transportation Safety Board determines that the probable cause of the accident was the overspeed impact between the heavy cut of tank cars and the uncoupled light boxcar, which resulted from the release of the tank cars at a higher-than-acceptable switching speed. The lack of written guidelines to assist the switchman in determining the proper switching speed contributed to the accident. The crewmembers' lack of understanding of the risks involved in switching hazardous materials also was a contributing factor.

RECOMMENDATIONS R-75-18-22

The National Transportation Safety Board recommends:

That the Federal Railroad Administration, in cooperation with the Railway Progress Institute and the Association of American Railroads:

- (1) Promulgate regulations to limit losses in accidents involving the transportation of bulk hazardous materials by rail. (Recommendation No. R-75-18)
- (2) Determine the capabilities of top and bottom shelf couplers, head shields, and a combination of both, and issue regulations to require that DOT-112A and -114A tank cars be equipped with the best practical combination. (Recommendation No. R-75-19)

That the Norfolk and Western Railway Company:

- (3) Insure that the yard employees and their supervisors who are involved in the handling of hazardous materials are cognizant of the risks involved in switching hazardous materials and require switchmen to switch cars of hazardous materials accordingly. (Recommendation No. R-75-20)
- (4) Establish a plan for combatting emergencies in Decatur Yard such as the one on July 19, 1974, which should include an adequate fire control system. (Recommendation No. R-75-21)

That the Secretary of Transportation:

- (5) Revise form F-5800.1 to obtain information required to support the rulemaking approach so that the degree of protection reflects the degree of severity of specific commodities in accidents. Such changes should address at least the delineation of the danger zone, and types and degree of injury or damages ex-