Log R-449

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

ISSUED: August 12, 1983

Forwarded to:

Honorable David C. Treen Governor of Louisiana Baton Rouge, Louisiana 70804

SAFETY RECOMMENDATION(S)

R-83-91

About 5:12 a.m., c.d.t., on September 28, 1982, Illinois Central Gulf Railroad (ICG) freight train Extra 9629 East (GS-2-28) derailed 43 cars on the single main track of the Hammond District in Livingston, Louisiana. Of the derailed cars, 36 were tank cars; 27 of these cars contained various regulated hazardous or toxic chemical commodities, 2 contained nonregulated hazardous materials, and 5 contained flammable petroleum products. A total of 20 tank cars were punctured or breached in the derailment. Fires broke out in the wreckage, and smoke and toxic gases were released into the atmosphere. Thermally-induced explosions of two tank cars that had not been punctured caused them to rocket violently. About 3,000 persons living within a 5-mile radius of the derailment site were evacuated for as long as 2 weeks. Nineteen residences and other buildings in Livingston were destroyed or severely damaged. More than 200,000 gallons of toxic chemical product were spilled and absorbed into the ground, requiring extensive excavation of contaminated soil and its transportation to a distant dump site. This has resulted in long-term closure of the railroad line and an adjacent highway. Property damage has been estimated to be in excess of \$14 million. 1/

The accident impact on the town of Livingston was swift, potentially devastating, and totally unanticipated. Firemen and policemen living in Livingston and the surrounding area were quick to respond. The fire chief quickly recognized that a pressure fire was building in the wreckage and that he did not have the capability to attack it. Instead of jeopardizing the safety of his men in a senseless exercise, he wisely used them to reroute highway traffic and to begin an immediate and rapid evacuation of the residents. Fortunately, most of the town's residents were still at home asleep or getting ready to go to work, the school had not yet opened, and there was little traffic on the streets and roads. Therefore, it was possible to quickly evacuate the residents by canvassing the town on a house-by-house basis. The Safety Board recognizes the value of the Louisiana State Police "Hazardous Materials Awareness Program" in creating awareness of evacuation problems that can occur as a result of a hazardous materials train derailment. The Safety Board believes that rural communities such as Livingston should be included in this program. No contingency plan to cope with such problems had been developed for the town. As pointed out by the mayor, evacuation later in the day would have been far more difficult.

<sup>1/</sup> For more detailed information, read Railroad Accident Report-"Derailment of Illinois Central Gulf Railroad Freight Train Extra 9629 East (GS-2-28) and Release of Hazardous Materials at Livingston, Louisiana, September 28, 1982" (NTSB-RAR/83/06).

Therefore, the National Transportation Safety Board recommends that the State of Louisiana:

Expand the Louisiana State Police "Hazardous Materials Awareness Program" to focus on rural communities, which have schools, business districts, residential areas, or highways in close proximity to railroad lines used to transport hazardous materials. (Class II, Priority Action) (R-83-91)

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. Therefore, we would appreciate a response from you regarding action taken or contemplated with respect to the recommendation in this letter.

BURNETT, Chairman, GOLDMAN, Vice Chairman, and McADAMS, BURSLEY, and ENGEN, Members, concurred in this recommendation.

By: Jim Burnett Chairman