

VI. RECOMMENDATIONS

The National Transportation Safety Board recommends that:

1. The Bureau of Motor Carrier Safety of the Federal Highway Administration (FHWA) study the existing regulations and requirements in 49 CFR 178.337, regarding LPG cargo tanks, for the purpose of instituting more explicit rulemaking toward reducing the likelihood of leakage and subsequent catastrophic failure of such cargo tanks in a variety of foreseeable types of accident crashes. (Recommendation No. H-73-37)

2. The National Highway Traffic Safety Administration, in cooperation with the Bureau of Motor Carrier Safety and the International Association of Chiefs of Police, Inc., as an addition to the official manual which supplements the Highway Safety Program Standard relating to police traffic services, develop criteria and procedures for the demarkation and evacuation of danger zones at hazardous-materials accidents occurring on highways. (Recommendation No. H-73-38)

3. The Bureau of Motor Carrier Safety and the National LP-Gas Association adopt a tentative distance of 1,400 feet as a danger-zone radius for MC-331 cargo tanks carrying liquefied petroleum gas which are exposed directly to fire. Such a radius should be used pending study and additional experience on which to base a more definitive danger-zone radius. (Recommendation No. H-73-39)

4. The Bureau of Motor Carrier Safety, the National LP-Gas Association, and the National Fire Protection Association jointly consider formally recognizing the fact that, while an LPG cargo tank continues to be directly exposed to fire, the opening and subsequent closing of a safety-relief valve (or valves) signals the dropping of liquid level below the fire-application point, and serves as an indicator of impending failure of the tank from heat softening. This information could then be included in approved safety manuals relating to LPG cargo-tank fires. (Recommendation No. H-73-40)

BY THE NATIONAL TRANSPORTATION SAFETY BOARD:

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