

1. F Authority to Control Marine Transportation of Hazardous Materials Is Inadequate in the Following Areas:

1. Inspection of inland motor towing vessels and licensing of their operators.
2. Movements of vessels transporting hazardous materials in congested waters.
3. Tracking or monitoring movements of vessels carrying hazardous materials.
4. Carriage of incompatible commodities on adjacent barges.

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3. Other Inadequacies in the Protection of the General Public Against Hazardous Materials Are Created by a Lack of:

1. Emergency contingency plans for all United States waters.
2. Delineation of responsibility for combating fires, or controlling damages resulting from hazardous materials incidents occurring on the navigable waters of the United States.
3. Formalized risk analysis procedures to protect the public from harm resulting from location of hazardous materials facilities.
4. Special qualifications for shipboard and terminal personnel handling particularly hazardous materials.
5. Federal, State, or local emergency personnel or equipment along hundreds of miles of navigable inland waters, which can be used to minimize the losses resulting from a hazardous materials casualty.

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8140. Based on our analysis of casualties involving hazardous materials, and the potential for a catastrophic accident resulting from the transportation of these materials by water, such legislation is urgently needed.

In addition, the Safety Board recommends that:

1. When statutory authority is obtained to control the movement of vessels carrying hazardous materials, the Coast Guard consider the need for monitoring the movements of certain materials which pose a risk of catastrophic accidents, or requiring emergency-position-indicating equipment to be carried on vessels transporting those commodities.
2. Persons who ship hazardous materials by water, comply with the Federal reporting requirements for hazardous materials incidents.
3. The Coast Guard, in its investigations of hazardous materials casualties, identify all the technical factors involved, particularly those which significantly affect the risk levels of the incident, and be alert to factors which might have application in similar accidents in other modes of transportation
4. Designers and builders of towing vessels develop operating performance criteria such as the capacity limits for tows, which would serve as a guide to the operator of the vessel.
5. The Department of Transportation accord high priority to the Coast Guard research and development program to develop methodologies for determining quantitative risk rankings for those hazardous materials which are transported in large quantities on the navigable waters of the United States.
6. The Department of Transportation and the Coast Guard, in development of hazardous materials regulations, utilize the "risk concept" technique in addition to the analyses of hazardous materials incidents.

VII. RECOMMENDATIONS

The Safety Board has recommended previously that the Congress enact legislation such as H.R. 6479 which would require the licensing of operators of certain towing vessels, an Ports and Waterways Act such as H.R.

7. The Office of Emergency Preparedness, the Coast Guard, and the U. S. Army Corps of Engineers prepare emergency contingency plans, similar to the Houston Ship Channel plan, to respond to catastrophic accidents involving hazardous materials for those waterways which carry large quantities of these materials. These plans should include an inventory of firefighting and emergency equipment and response personnel available by regions. They should include the stockpiling of firefighting and other emergency equipment at strategic locations from which they can be dispatched to the scene of the casualty by air or other expeditious means.

8. The Coast Guard, within its Captain of the Port areas of jurisdiction, designate

specific functions of firefighting and emergency operations in those areas in which risk of hazardous materials incidents are greatest.

9. The Department of Transportation establish a National Hazardous Materials Response Center which would advise onscene personnel how best to control hazardous materials accidents, and which would be capable of dispatching the nearest qualified personnel and necessary equipment to render assistance.

10. The Coast Guard revise the regulations concerning the qualifications of tanker-men and licensed officers who handle extremely hazardous materials to require special qualifications and endorsements for these specific materials.

BY THE NATIONAL TRANSPORTATION SAFETY BOARD:

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