

SP-20

NATIONAL TRANSPORTATION SAFETY BOARD
WASHINGTON, D.C.

Log I-76

ISSUED: May 16, 1985

Forwarded to:

Honorable Elizabeth Hanford Dole
Secretary
Department of Transportation
Washington, D.C. 20590

SAFETY RECOMMENDATION(S)

I-85-7 and -8

About 1:30 p.m., e.s.t., on March 6, 1984, orange vapors began escaping from an MC-307/312 cargo tank containing 3,200 gallons of mixed hazardous waste acids while it was parked at a truck dealership in Orange County, Florida. The volume of vapors increased as the acids rapidly corroded the cargo tank's stainless steel shell. At 5:39 p.m., the acids penetrated the cargo tank's shell and flowed onto the ground. About 250 persons were evacuated from a 3-square-mile area. Twelve persons who came in contact with the vapors were injured, four seriously the cargo tank was destroyed. 1/

Hazardous wastes often are combinations of several hazardous materials which have been contaminated during diverse manufacturing processes. General information is not available on the reaction of these highly varied hazardous wastes with transportation packagings or linings. It is imperative, therefore, that shippers and carriers determine the unique hazards posed by the wastes before the materials are transported.

The Department of Transportation (DOT) has assigned responsibility to the shipper for determining proper packaging of hazardous materials throughout various parts of the regulations (49 CFR 171.2, 171.3, 172.101, 173.3, 173.21, and 173.24). On April 3, 1983, DOT published interpretative material in the Federal Register (48 FR 15127-8) "to enhance the safe transportation of hazardous materials in cargo tanks," and because, as a DOT witness testified during the public hearing of the investigation, "there was some misunderstanding in the shipping community as far as their responsibilities were concerned for the selection of the proper vessel and identification of the proper vessel." Therein, DOT undertook to explain to shippers of hazardous materials the responsibilities assigned to them in the regulations (49 CFR 173.22 and 173.24) and to advise shippers of their responsibility to assess the compatibility of their products with materials used in the construction of cargo tanks and of the need to examine their operating practices relative to offering hazardous materials for shipment in cargo tanks to assure they were in compliance with the regulations. Nevertheless, the Safety Board believes that DOT's regulations should be revised to clearly describe the responsibilities that are assigned to the shipper, and that particular emphasis should be given to the unique hazards that waste material may present.

1/ For more detailed information, read Hazardous Materials Investigation Report---"Release of Hazardous Waste Acid from Cargo Tank Truck, Orange County, Florida, March 6, 1984" (NTSB/HZM-85/01).

Harris Corporation (Harris) did not determine that the waste acids shipped on the day of the accident could be safely transported in an unlined stainless steel cargo tank before loading the material into the cargo tank. Harris employees testified that they believed it was the carrier's, not the shipper's responsibility to assure compatibility of the cargo tank with the material shipped. Harris, however, had a responsibility to determine that the waste acids could be safely transported in packagings selected.

The Resource Conservation and Recovery Act of 1976 (RCRA) requires the Administrator of the Environmental Protection Agency (EPA) to ensure that the hazardous waste transportation regulations it promulgates are consistent with the regulations promulgated by DOT under the Hazardous Materials Transportation Act (HMTA). Title 40 CFR 263.10 states, "EPA has expressly adopted certain regulations of DOT governing the transportation of hazardous materials. . .including labeling, marking, using proper containers, and reporting discharges."

On June 24, 1980, DOT and EPA signed a Memorandum of Understanding to delineate areas of responsibility for the enforcement of standards applicable to the shipment and transportation of hazardous waste. The Memorandum of Understanding states that EPA will provide to the DOT on a continuing basis a list of all hazardous waste transporters who have notified EPA pursuant to RCRA, and that DOT will conduct an on-going program of inspection of transporters and shippers of hazardous waste to monitor their compliance with HMTA regulations.

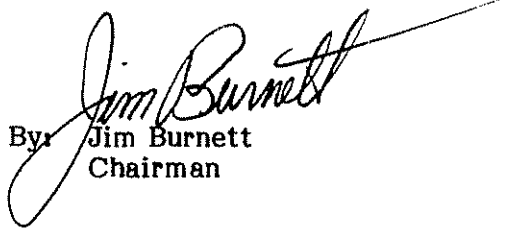
Harris had been inspected frequently by the EPA to determine compliance with RCRA, but it never had been audited or visited by DOT to determine compliance with HMTA; therefore, the shipper's compliance effort centered exclusively around EPA rather than DOT regulations. DOT and EPA should recognize that many companies which ship hazardous waste may not fully appreciate their need to meet the requirements of DOT as well as EPA. Some of them lack the familiarity with DOT regulations common to shippers of non-waste hazardous material. DOT and EPA should undertake a joint program to distribute information to hazardous waste generators to insure that those generators understand their responsibilities when shipping hazardous wastes. In conjunction with such a program, DOT should increase its audits of hazardous waste generators and its roadside inspections of hazardous waste shipments to increase compliance with regulatory requirements.

Therefore, as a result of its investigation, the National Transportation Safety Board recommends that the Department of Transportation:

In conjunction with the Environmental Protection Agency, develop and distribute to hazardous waste shippers (generators) information regarding shipper responsibilities under the Hazardous Materials Transportation Act when shipping hazardous wastes. (Class II, Priority Action) (I-85-7)

Increase audits of hazardous waste shippers and roadside inspections of carriers to improve compliance with the Hazardous Materials Transportation Act. (Class II, Priority Action) (I-85-8)

BURNETT, Chairman, GOLDMAN, Vice Chairman, and BURSLEY, Member concurred in these recommendations.


By Jim Burnett
Chairman