

SP-20

NATIONAL TRANSPORTATION SAFETY BOARD
WASHINGTON, D.C.

Log I-80

ISSUED: May 16, 1985

Forwarded to:

Mr. Joseph F. Knott
President
Chemical Waste Management, Inc.
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SAFETY RECOMMENDATION(S)

I-85-5 and -6

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.

At the time Harris Corporation (Harris) hazardous waste coordinator ordered the cargo tank, he did not provide the Chemical Waste Management (CWM) dispatcher with a waste profile number to identify the hazardous waste to be picked up on March 6, and the CWM dispatcher did not request a waste profile number. The CWM dispatcher incorrectly assumed that the hazardous waste was hydrofluoric acid solution (waste profile number 15222) since that was the only waste material that CWM previously had transported for Harris in cargo tanks. Had Harris provided CWM the waste profile number (62810), the CWM dispatcher would have been alerted that the material being shipped was not the same material that CWM previously had transported in cargo tanks.

Because CWM's operations in Emelle, Alabama, center around the treatment, storage, and disposal of hazardous wastes, transportation personnel have access to detailed information (including the services of chemists) to help them understand the characteristics and hazards of shipments that other motor carriers normally do not. If CWM had had an accurate description of the material on file, and the shipment had been

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).

identified properly when the cargo tank was ordered, it is unlikely that CWM would have selected an unlined cargo tank because of the hydrochloric acid content in the waste material. Therefore, it is as imperative that CWM train personnel involved in the assignment of equipment to positively identify the materials to be transported and to assure that an accurate analysis of packaging requirements is performed before a packaging is selected, as it is that Harris has discharged its responsibility appropriately.

CWM had yet another opportunity to learn that Harris intended to load a material different from that which CWM expected to transport. The CWM dispatcher gave the driver written instructions that told him where to pick up the load and who to contact at the shipper's facility, but the dispatcher did not advise the driver the specific waste stream to load. Had the driver known the waste profile number (15222) of the material he was expected to pick up, he could have determined before loading that the shipper intended to load a different waste stream (62810) than the dispatcher had intended to be loaded. The driver then would have had an opportunity to seek help from the CWM office to identify the composition of the material that Harris intended to ship before it was loaded. Therefore, since the driver can afford a motor carrier a final opportunity to assure that only waste material which the carrier expects to be loaded into the cargo tank actually is, the Safety Board believes that drivers should be trained to verify the identification of those materials at the shipper's facility before loading operations begin.

Neither the CWM driver nor the employees at the truck dealership initially recognized the hazards posed by the acid vapors which were released from the cargo tank. Employees of the truck dealership were aware that vapors were escaping from the cargo tank for over 1 1/2 hours before the owner initiated evacuation, and no one from the dealership called the Orange County Fire Department (OCFD). The driver called his office, in accordance with company procedures, rather than calling for local emergency response assistance. Because of the dangers imposed by the transportation of hazardous wastes, the Safety Board believes that CWM should evaluate its training of drivers concerning recognition of problems that may be incurred during transportation of hazardous wastes as well as its instructions to drivers concerning notification of local emergency response personnel.

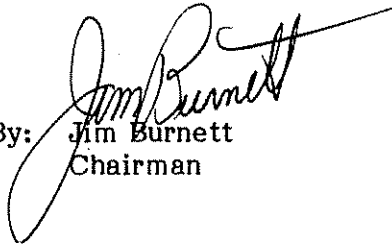
Therefore, as a result of its investigation, the National Transportation Safety Board recommends that Chemical Waste Management, Inc.:

Evaluate company operational procedures and revise them, as necessary, to require that vital information necessary for the safe transportation of hazardous waste is obtained from the shipper before equipment, such as a cargo tank, is dispatched and that drivers are given necessary information and instructions to confirm that the hazardous waste to be loaded conforms to the shipping order, and that proper loading procedures are followed. (Class II, Priority Action) (I-85-5)

Evaluate company training and instruction procedures, and revise them, as necessary, to instruct drivers in the recognition of problems that may be incurred during transportation of hazardous wastes and in the notification of emergency response personnel. (Class II, Priority Action) (I-85-6)

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" (Public Law 93-633). The Safety Board is vitally interested in any actions taken as a result of its safety recommendations and would appreciate a response from you regarding action taken or contemplated with respect to the recommendations in this letter.

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

By: 
Jim Burnett
Chairman