M-124

NATIONAL TRANSPORTATION SAFETY BOARD WASHINGTON, D.C.

ISSUED: July 15, 1980

Forwarded to:

Mr. James H. Dill President C. L. Dill Company, Inc. 360 Belle Chasse Highway N. Belle Chasse, Louisiana 70037

SAFETY RECOMMENDATION(S)

M-80-49 through -51

About 0930 c.d.t., on June 5, 1979, a buried 4-inch-diameter, high-pressure, natural gas pipeline was separated at a collar by a mooring spud dropped from the crane barge C. L. DILL 10 as the barge was being maneuvered by a tugboat alongside tank battery No. 205 in a channel of the Texaco, Inc., oil field in the Garden Island Bay section of the Mississippi River Delta. Gas, escaping under 700-psig pressure, was ignited by an unknown source and set the barge, tugboat, and tank battery on fire. Four of the six persons on the barge drowned in their attempt to escape. The fire was extinguished about 1030; damage was estimated at \$500,000. 1/

The barge had been pushed from the Texaco camp to the tank battery by the tugboat M/V DILL V. The barge and tugboat with crews had been contracted by Texaco, Inc., from the C. L. Dill Company, Inc., to replace a pump at the tank battery. The accident occurred while the barge was being maneuvered into a mooring position. The Safety Board determined that the crane operator, who was in charge, failed to survey the channel for pipeline crossings near the tank battery before dropping the spud. Normally, mooring at the tank battery was made using mooring lines tied to piling clusters along the tank battery. The use of spuds for mooring at a tank battery was permitted, but only when special precautions were taken.

The crane barge had been scheduled first for cribbing repairs at oil well No. 160 and then for a pump replacement at tank battery No. 205. There had been no arrangements made for Texaco supervision at the oil well. The schedule as planned would have permitted time for the head roustabout to disconnect the pump while the cribbing repairs were made. The crane operator in charge of the barge deviated from the schedule and went directly to the tank battery. Had the barge been met by the head roustabout or some other supervisor, who had knowledge of the local hazards to direct the mooring operations, the spud might not have been dropped. There were no signs on the tank battery to prohibit mooring with spuds in the channel opposite the tank battery.

For more detailed information read "Marine Accident Report--Crane Barge C. L. DILL 10 Fire, Garden Island Bay, Mississippi River Delta, June 5, 1979" (NTSB-MAR-80-9).

The Safety Board was unable to determine how the fire started. Exhaust from diesel engines and sparks from an operating generator onboard the barge were available sources of ignition. The source of ignition also could have been lighted tobacco products. The crane operator, barge foreman, and one laborer smoked. There were no signs on the tank battery prohibiting smoking, and someone on the barge who was unaware of the nosmoking rule may have been smoking.

Texaco employees who worked in the oil fields were required to attend regularly scheduled safety meetings. Attendance was optional for employees of outside contractors, such as Dill. The safety subjects discussed included smoking restrictions, policy on wearing work vests, and hazards in the oil fields. Their failure to use available lifesaving devices and their uncoordinated efforts to save themselves indicated that the DILL crews were not trained for emergencies.

Therefore, the National Transportation Safety Board recommends that the C. L. Dill Company, Inc.:

> Prohibit its employees from undertaking work at tank batteries and other hazardous locations in the oil fields unless a supervisor of the contracting oil company is present. (Class II, Priority Action) (M-80-49)

> Establish a program of instruction and training in emergency procedures related to the work for all water-borne employees who work in the oil fields of the Mississippi River Delta. (Class II, Priority Action) (M-80-50)

> Require all water-borne personnel to attend the regularly scheduled safety meetings related to their work offered by oil companies party to working contracts. (Class II, Priority Action) (M-80-51)

KING, Chairman, GOLDMAN and BURSLEY, Members, concurred in these recommendations. DRIVER, Vice Chairman, and McADAMS, Member, did not participate.

By: James B. King

Chairman