

CARGO TANKS

SAFETY ADVISORY

DON'T AVOID DOUBLE BULKHEAD VOIDS!

On June 18, 1998 an MC-312 specification cargo tank was transporting 4,800 gallons of hydrochloric acid from New Jersey to New York. It was a three compartment cargo tank motor vehicle having double bulkheads between compartments. During the trip, the cargo tank split in the void area between two compartments. The bulkheads closest to the split did not fail and no product was lost.

WHY DID THIS HAPPEN?

A subsequent investigation revealed the drain in the void between the double bulkheads was plugged solid with sediment for what appeared to be an extended period of time. This would have contributed to corrosion (see above photos) and weakening of the tank shell connecting structure particularly since the top of the void had an open vent hole.

Title 49, Code of Federal Regulations speaks directly to this issue. Section 178.340-7(c) addresses the space between double bulkheads. It states in part: "This air space shall be vented and be equipped with drainage facilities which shall be kept operative at all times."

ATTENTION - CARGO TANK TESTERS AND INSPECTORS!

Title 49 C.F.R. contains certain regulations applicable to your duties. Section 180.407(d)(2)(i) states in part: "The tank shell...must be inspected for...any other condition that might render the tank unsafe for transportation service."

Also, § 180.409(a) requires persons performing tests and inspections to: "Be familiar with DOT specification cargo tanks" and register with the Pipeline and Hazardous Material Safety Administration.

THE BOTTOM LINE ?

The cargo tank involved in this incident was an MC-312 specification cargo tank. Although the MC-312 is no longer manufactured and the specifications are no longer printed, it is the responsibility of those performing tests and inspections to be familiar with the DOT specification cargo tanks for which they are testing.



Safety Message from Project P.I.E.
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