

# U. S. Chemical Safety and Hazard Investigation Board RECOMMENDATIONS STATUS CHANGE SUMMARY

Report:	Allied Terminals Fertilizer Tank Collapse
Recommendation Number(s):	2009-3-I-VA-R7
Date Issued:	May 27, 2009
Recipient:	Kinder-Morgan Terminals LLC (K-M) formerly Allied Terminals, Inc. (ATI)
New Status:	R7: Closed – Acceptable Action
Date of Status Change:	June 1, 2015

#### **Recommendation Text(s):**

Develop and implement worker safety procedures for initial filling of tanks following major modification or change-in-service. At a minimum, require the exclusion of all personnel from secondary containment during the initial filling.

## **Board Status Change Decision:**

## A. Rationale for Recommendation

On November 12, 2008 a two-million-gallon liquid fertilizer storage tank collapsed at the Allied Terminal, Inc. (ATI) distribution facility in Chesapeake, VA. The incident critically injured two contract workers, who were hospitalized. Two members of the public who tried to aid the injured men required treatment likely related to exposure to ammonia vapor from the released fertilizer. The fertilizer overtopped a containment dike and flooded sections of a nearby residential neighborhood. At least 200,000 gallons of spilled fertilizer could not be accounted for, and some reached the nearby Elizabeth River, which flows into the Chesapeake Bay.

The CSB concluded that ATI had no safety procedures or policies for work on or around tanks that were being filled for the first time following a major modification. ATI directed the contractors to seal leaking rivets while Tank 201 was being filled to its calculated maximum liquid level for the first time with liquid fertilizer. The CSB recommended that ATI develop appropriate safety procedures to address this potentially hazardous situation.

#### B. Response to the Recommendation

On June 11, 2013, Kinder-Morgan Liquid Terminals, LLC took effective control of the ATI facilities in Chesapeake and Norfolk, VA. In February of 2015, Kinder-Morgan issued a new standard operating procedures for safely returning tanks to service after repairs and inspections at a Kinder Morgan Terminal Facility. The activities covered include both hydrostatic testing of tanks after major repairs are completed and the first fill with product after changes in service, inspections, and/or minor repairs not requiring hydrostatic testing

# C. Board Analysis and Decision

As Kinder-Morgan has developed and implemented standard operating procedures that control and limit entry into secondary containment areas during initial filling of tanks following a major modification or change in service, the Board voted to change the status of CSB Recommendation No. 2009-3-I-VA-R7 to: "Closed – Acceptable Action."