

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-UR1 through UR3
Date Issued:	December 5, 2008
Recipient:	Allied Terminals, Inc.
New Status:	UR1: Closed – No Longer Applicable UR2: Closed – No Longer Applicable UR3: Closed – No Longer Applicable
Date of Status Change:	September 30, 2013

Recommendation Text(s):

CSB Recommendation No. 2009-03-I-VA-UR1:

Take immediate action to reduce the risk of a catastrophic failure of Tanks 202, 205, and 209 at the Allied Terminals Hill Street facility including but not limited to significantly reducing the maximum liquid levels ("safe fill height") based on sound engineering principles. Report the actions taken to the City of Chesapeake.

CSB Recommendation No. 2009-03-I-VA-UR2:

Select and retain a qualified, independent tank engineering firm to evaluate Tanks 202, 205, and 209 and determine their fitness for continued service. The evaluation should be based on recognized and generally accepted good engineering practices, such as API 653 - Tank Inspection, Repair Alteration, and Reconstruction and API 579 - Fitness for Service.

CSB Recommendation No. 2009-03-I-VA-UR3:

Within 30 days, provide the report prepared by the independent tank engineering firm to the City of Chesapeake, together with a comprehensive action plan and schedule to address any identified deficiencies.

Board Status Change Decision:

A. Rationale for Recommendation

On November 12, 2008, an aboveground storage tank containing liquid fertilizer catastrophically failed at the Allied Terminals distribution facility in Chesapeake, VA. The incident critically injured two contract workers. At least 200,000 gallons of fertilizer were released and some reached the nearby Elizabeth River.

Since the distribution facility had three other tanks with hazards similar to those present in the failed tank, the CSB recommended that Allied take actions consistent with sound engineering principles to reduce their risk of failure and then report these actions to the City of Chesapeake.

B. <u>Response to the Recommendation</u>

Following the issuance of the CSB recommendations, the company hired an independent engineering consulting firm to determine new maximum safe fill heights for tanks 202, 205 and

209. Based on ultrasonic testing of vertical welds, recommended maximum safe fill heights were determined for the three tanks. In response to these efforts, the Board voted to change the status of CSB Recommendations No's 2009-3-I-VA-UR1 through UR3 to: "Open – Acceptable Response" on May 29, 2009.

Allied Terminals took control measures to ensure that tank levels were kept below these maximum fill heights until a final decision was made to either remove or repair the tanks. On May 16, 2013, Allied Terminals informed the CSB that Tanks 202, 205 and 209 were dismantled. Subsequent communication with the City of Chesapeake Fire Department revealed that tanks 202, 205 and 209 had been demolished and no new tanks had been installed on their foundations.

C. Board Analysis and Decision

As Tanks 202, 205 and 209 have been demolished; the Board voted to change the status of CSB Recommendations No's 2009-3-I-VA-UR1 through UR3 to: "Closed – No Longer Applicable."