



# U. S. Chemical Safety and Hazard Investigation Board

## RECOMMENDATIONS STATUS CHANGE

### SUMMARY

<b>Report:</b>	<b>Emergency Shutdown Systems for Chlorine Transfer (Honeywell 4)</b>
<b>Recommendation Number:</b>	<b>2005-06-I-LA-R1</b>
<b>Date Issued:</b>	<b>June 8, 2007</b>
<b>Recipient:</b>	<b>U.S. Department of Transportation</b>
<b>New Status:</b>	<b>Closed - No Longer Applicable</b>
<b>Date of Status Change:</b>	<b>June 1, 2015</b>

#### Recommendation Text:

*Expand the scope of DOT regulatory coverage to include chlorine railcar unloading operations. Ensure the regulations specifically require remotely operated emergency isolation devices that will quickly isolate a leak in any of the flexible hoses (or piping components) used to unload a chlorine railcar. The shutdown system must be capable of stopping a chlorine release from both the railcar and the facility chlorine receiving equipment. Require the emergency isolation system be periodically maintained and operationally tested to ensure it will function in the event of an unloading system chlorine leak.*

#### Board Status Change Decision:

##### A. Rationale for Recommendation

The CSB's a safety bulletin, "Emergency Shutdown Systems for Chlorine Transfer" emphasized that well-maintained, reliable emergency shutdown systems at railcar unloading stations can significantly reduce the potential for significant chlorine releases caused by failures in the transfer connections. The U.S. Department of Transportation's Hazardous Materials Regulations (HMR, at 49 CFR 171-180) do not require emergency shutdown equipment for railcar transfer systems, however, because the agency's jurisdiction is limited to transportation-related activities, and railcar unloading operations typically occur after transportation has ended (i.e., after the railcar has been delivered.) Railcar unloading operations are subject to OSHA and EPA regulations; however, the CSB noted that both OSHA's Process Safety Management Standard and the EPA's Risk Management Program regulation are performance-based regulations and do not have specific requirements for chlorine railcar unloading systems. The Board therefore recommended that DOT expand the scope of its regulatory coverage to include chlorine railcar unloading operations.

##### B. Response to the Recommendation

The Department of Transportation (DOT) has determine that its statutory authority "does not extend to the unloading of railcars at a fixed facility (in the absence of a carrier), including the equipment used by a facility," therefore the agency is unable to fulfill the intent of the CSB's recommendation. Furthermore, DOT does not have the authority to "expand the scope" of its regulatory coverage to cover chlorine railcar unloading operations. DOT receives its regulatory authority from the U.S. Congress; therefore, changing the DOT's jurisdiction would require legislation to revise the scope of DOT's authority. Further, OSHA has clarified that it considers Chlorine Institute guidance, which requires automatic shutoff valves for railcar chlorine unloading, to be Recognized and Generally Achievable Good Engineering Practice (RAGAGEP); thus railcar chlorine unloading is regulated under OSHA's Process Safety Management standard. The use of Chlorine Institute guidance as RAGAGEP is expected to be further clarified by OSHA in forthcoming RAGAGEP guidance.

##### C. Board Analysis and Decision

The Department of Transportation's regulatory authority precludes it from meeting the intent of the CSB's recommendation as currently written, and chlorine railcar unloading is considered RAGAGEP and thus regulated by OSHA. Therefore, the Board voted to designate CSB Recommendation No. 2005-06-I-LA-R1 with the status "Closed – No Longer Applicable."