

Chemical Safety and Hazard Investigation Board

OFFICE OF GENERAL COUNSEL

Memorandum

To: Board Members

From: Richard C. Loeb RCZ

Cc: Leadership Team Mark Kaszniak Christina Morgan

Subject: Board Action Report - Notation Item 2013-08

Date: February 26, 2013

On January 30, 2013, the Board approved Notation Item 2013-08, thereby designating Recommendations 2005-3-I-NJ-R3 and R4, to Rexarc International, Inc. (from the Acetylene Services Co. investigation), with the status of Closed – Acceptable Action.

Voting Summary - Notation Item 2013-08

Disposition: APPROVED

Disposition date: January 30, 2013

	Approve	Disapprove	Calendar	Not Participating	Date
R. Moure-Eraso	X				1/28/2013
M. Griffon	X				1/30/2013
B. Rosenberg	X				1/30/2013



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

Report:	Explosion at ASCO: Dangers of Flammable Gas Accumulation
Recommendation Number:	2005-3-I-NJ-R3 and R4
Date Issued:	January 19, 2006
Recipient:	Rexarc International, Inc.
New Status:	Closed- Acceptable Action
Date of Status Change:	January 30, 2013

Recommendation Text:

Recommendation No. 2006-03-I-NJ-R3:

Immediately inform existing acetylene generator users that the check valve did not prevent acetylene gas backflow in this incident. Recommend interim actions be taken to ensure that Rexarc check valves in service on acetylene production equipment will operate reliably.

Recommendation No. 2006-03-I-NJ-R4:

Replace check values of this or similar design supplied by Rexarc with values that will perform more reliably in recycle water service.

Board Status Change Decision:

A. <u>Rationale for Recommendation</u>

The recommendation was issued pursuant to the CSB's investigation of the January 25, 2005 explosion at Acetylene Services Company (ASCO), an acetylene manufacturing and packaging company in Perth Amboy, NJ. The CSB's investigation found that acetylene produced in a generator flowed back past a check valve through a recycled water line and accumulated in a shed, where it ignited and exploded. The CSB concluded that the design of the check valve, which was supplied by Rexarc International, Inc. (Rexarc), made it susceptible to malfunction.

B. Response to the Recommendation

Rexarc informed the CSB that they identified customers who used the check valve in service at ASCO and provided them with a different model. Rexarc staff also provided copies of Failure Mode Effect Analyses conducted for both the obsolete and replacement check valves and explained how the new valve is designed to operate more reliably than its predecessor.

C. Board Analysis and Decision

Because Rexarc reported actions that are consistent with the intent of these two recommendations, the Board designated both with the status "Closed- Acceptable Action."