Chemical Safety and Hazard Investigation Board

OFFICE OF GENERAL COUNSEL

Memorandum

To: Board Members

From: Richard C. Loeb

Cc: Leadership Team
Mark Kaszniak
Christina Morgan

Subject: Board Action Report – Notation Item 2013-32

Date: April 29, 2013

On April 10, 2013, the Board approved Notation Item 2013-32, thereby designating Recommendations 2003-08-I-RI-R3 and R4, to Technic, Inc. (from the Technic Investigation), with the status of Closed – Acceptable Action.

Voting Summary – Notation Item 2013-32

Disposition: APPROVED

Disposition date: April 10, 2013

	Approve	Disapprove	Calendar	Not Participating	Date
R. Moure-Eraso	**X**				4/10/2013
M. Griffon	**X**				4/19/2013
B. Rosenberg	**X**				4/10/2013

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

Report:	**Technic, Inc. Ventilation System Explosion**
Recommendation Numbers:	**2003-08-I-RI-R1** **2003-08-I-RI-R3** **2003-08-I-RI-R4**
Date Issued:	**June 6, 2006**
Recipient:	**Technic, Inc.**
New Status:	**R1: Open-Acceptable Response** **R3: Closed-Acceptable Action** **R4: Closed-Acceptable Action**
Date of Status Change:	**April 10, 2013**

Recommendation Text:

Recommendation No. 2003-08-I-RI-R3:
Implement a preventive maintenance program for the vent collection system that includes regular inspection, training and troubleshooting.

Recommendation No. 2003-08-I-RI-R4:
Work with the Cranston Fire Department to improve the facility's emergency response plan, including emergency response procedures and interface with the surrounding community. Submit the plan to the fire department for review.

Board Status Change Decision:

A. Rationale for Recommendation

On February 7, 2003, an explosion and fire occurred inside a vent collection system at the Technic Inc. (Technic) plating and chemical manufacturing and research facility in Cranston, Rhode Island. One employee was critically injured and eighteen others were sent to the hospital for medical evaluations. The surrounding community was evacuated and facility operations were interrupted for several weeks.

The CSB concluded that the incident was likely caused by a chemical reaction inside a vent collection system which started when an employee tapped with a small hammer on a duct that sounded blocked. The vent collection system was designed to transport vapors, gases, and mists from various processes to a scrubber to be treated in accordance with EPA air emission standards.

The CSB identified failures within Technic's safety management system as the underlying cause of the incident. These included the absence of a formal program for inspection and preventive maintenance of the vent collection system and deficiencies in the facility's emergency action plan, which caused delays and miscommunication during the emergency response to the incident.

B. Response to the Recommendation:

Technic provided a copy of their newly developed preventive maintenance program. They submitted an inspection schedule and an example of a completed inspection of the ventilation system. Technic also provided a copy of their newly revised emergency action plan that was submitted to the Cranston Fire Department. The fire department annually revisits the plan and makes changes if needed, then sends a revised emergency action plan back to the company.

C. Board Analysis and Decision:

The Board voted to change the status of Recommendation Nos. 2003-08-I-RI-R3 and 2003-08-I-RI-R4 to: “Closed-Acceptable Action” because Technic provided adequate documentation that they met the intent of the recommendations and implemented them.