U. S. Chemical Safety and Hazard Investigation Board

RECOMMENDATIONS STATUS CHANGE SUMMARY

Report:	Chevron Refinery Fire
Recommendation Number(s):	2012-3-I-CA-R33 & R35
Date Issued:	April 19, 2013
Recipient:	Chevron USA
New Status:	Open – Acceptable Response or Alternate Response
Date of Status Change:	December 29, 2015

Recommendation Text(s):

CSB Recommendation No. 2012-3-I-CA-R33
Develop a method to assign accountability at Chevron to determine whether any whether any new Energy Technology Company (ETC) recommended program or industry best practice, such as API guidance must be followed to ensure process safety or employee personal safety. This method shall include monitoring of these practices and guidance at a refining system level and at the refinery level. Develop a tracking system to monitor the progress of implementing these selected practices and guidance to completion.

CSB Recommendation No. 2012-3-I-CA-R35
Develop an approval process that includes a technical review that must be implemented prior to resetting the minimum alert thickness to a lower value in the inspection database.

A. Rationale for Recommendation

On August 6, 2012, the Chevron Refinery in Richmond, California, experienced a catastrophic pipe failure in a crude unit, causing the release of a flammable hydrocarbon process fluid which partially vaporized into a large cloud, resulting in 19 employee injuries and 15,000 people from the surrounding area seeking medical treatment. The CSB's investigation found that the pipe failure was caused by sulfidation corrosion, a damage mechanism that causes piping walls to thin over time. The CSB found problems with various aspects of CUSA's programs and thus issued recommendations to address the gaps identified.

B. Response to the Recommendation

In June, 2015, CUSA indicated that it is currently developing and implementing a system to determine whether any new ETC recommended program or industry best practice should be incorporated into CUSA processes. CUSA has indicated that they will monitoring and track these processes and their implementation in a database.

In June, 2015, CUSA indicated that they will implement a system to address piping minimum alert thickness.

C. Board Analysis and Decision

As CUSA has indicated that they plan to fulfill the intent of the CSB's recommendations and have taken steps towards implementing these recommendations, the Board voted that CSB Recommendations, **2012-**

3-I-CA-R33, R34 and R35 be designated as **"Open – Acceptable Response or Alternate Response."** Closure will be contingent upon completion and evaluation of the above described actions.