



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

<b>Report:</b>	Chevron Refinery Fire
<b>Recommendation Number(s):</b>	2012-3-I-CA-R25
<b>Date Issued:</b>	April 19, 2013
<b>Recipient:</b>	Board of Supervisors, Contra Costa County, California
<b>New Status:</b>	Closed – Acceptable Action
<b>Date of Status Change:</b>	October 11, 2018

### **Recommendation Text 2012-3-I-CA-R25:**

*Implement a compensation system to ensure the regulator has the ability to attract and retain a sufficient number of employees with the necessary skills and experience to ensure regulator technical competency at all levels of process safety regulatory oversight and policy development in Contra Costa County, California. A market analysis and benchmarking review should be periodically conducted to ensure the compensation system remains competitive with California petroleum refineries.*

### **Board Status Change Decision:**

#### **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 flammable hydrocarbon process fluid which partially vaporized into a large cloud. Nineteen Chevron employees engulfed by the vapor cloud escaped, narrowly avoiding serious injury. The ignition and subsequent continued burning of the hydrocarbon process fluid resulted in a large plume of unknown particulates and vapor. Approximately 15,000 people from the surrounding area sought medical treatment in the weeks following the incident.

The U.S. Chemical Safety and Hazard Investigation Board's (CSB) 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 multiple reasons for the failure to detect this serious damage, one of which is that the Contra Costa Health Services' Hazardous Materials Program (CCHMP) lacked sufficient resources and funding, limiting its ability to hire additional highly qualified staff to oversee the petroleum refineries in Contra Costa County (CCC).

#### **B. Response to the Recommendation**

Contra Costa County (CCC) Board of Supervisors approved a number of wage increases between 2014 and 2018, bringing the annual salary range for engineers to \$119,1007 to \$143,909 per year, which is comparable to Chemical Engineer salaries in that area. In July 2018, CCC finalized a policy that establishes a process to review the Accidental Release Prevention Engineers' base salary prior to contract negotiations. CCC will review the average Chemical

Engineer salary in the Bay Area with an emphasis on what petroleum refineries are paying Chemical Engineers, and, if needed, a cost of living adjustment will be applied using the Federal General Schedule Payscale.

C. Board Analysis and Decision

As CCC has taken action that meets the intent of the CSB Recommendation No. 2012-3-I-CA-R25, the Board voted to designate the status of the recommendation as: “**Closed-Acceptable Action.**”