



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

Report:	Tesoro Refinery Fatal Explosion Fire
Recommendation Numbers:	2010-8-I-WA-R06
Date Issued:	May 1, 2014
Recipient:	Governor and Legislature of the State of Washington
New Status:	Open – Acceptable Response or Alternate Response
Date of Status Change:	March 1, 2017

Recommendation Text:

CSB Recommendation No. 2013-02-I-TX-R06:

Establish a well-funded, well-staffed, technically qualified regulator with a compensation system to ensure the Washington Department of Labor and Industries regulator has the ability to attract and retain a sufficient number of employees with the necessary skills and experience to ensure regulator technical qualifications. Periodically conduct a market analysis and benchmarking review to ensure the compensation system remains competitive with Washington petroleum refineries.

Board Status Change Decision:

A. Rationale for Recommendation

On May 1, 2014, the U.S. Chemical Safety Board (CSB) released its report on the April 2, 2010, catastrophic heat exchanger rupture at the Tesoro Anacortes refinery which fatally injured seven workers. The CSB found that management at the refinery failed to effectively evaluate the potential for high temperature hydrogen attack (HTHA), the damage mechanism which caused the heat exchanger rupture.

At the time of the investigation, the Washington Department of Occupational Safety and Health (DOSH) employed only four Process Safety Specialists to cover approximately 387 PSM facilities¹ within the state of Washington; only one of which had significant refinery experience. None of the Process Safety Specialists had metallurgical experience and only one had an engineering background. Despite the fact that DOSH performed a detailed National Emphasis Program (NEP) inspection at the Tesoro refinery, the team did not have the technical expertise to inspect for and identify possible damage mechanisms present, such as HTHA. Individuals within Washington Department of Labor and Industries (L&I) expressed to the CSB that there was no funding in the state of Washington to form a multi-disciplinary process safety group to conduct more thorough facility inspections.

B. Response to the Recommendations

The Washington budget operates on a biennium schedule, with the 2015-17 session being a long budget session. L&I drafted and requested a budget for \$2,061,000 and 5.8 biennial FTE to create a “Chemical Hazard Team” which would establish a unit of specially trained inspectors to conduct compliance audits. The proposal noted that Washington has five refineries and 387 worksites that fall under Process Safety

¹ Original report cited 270, in 2015, Washington Department of Labor and Industries stated this was 387, with still only four inspectors.

Management (PSM) requirements and only four inspectors qualified to inspect them. Overall, L&I made a cogent and thorough argument for the need for additional staff and funding.

The Governor's budget included the \$2,061,000 during the 2015-17 biennium budget to create a chemical hazards team. The House budget proposal also included funding for the chemical hazards team, until the June 29th, 2015, iteration, however; the Senate budget request never included this request as a line item and the item ultimately was not included in the final budget compromise. The Governor, House and L&I have taken considerable efforts in championing the budget request, while the Senate did not consider the item in their budget.

In October 2016, L&I announced that they would begin discussions with its PSM advisory committee to revise Washington's PSM regulations. In December 2016, L&I stated that they did not resubmit a budget for the 2017-2019 long budget session for the "Chemical Hazard Prevention Team." They chose to request an increase in the total number of safety and health inspectors rather than creating a PSM specific program. Should the PSM program be revised, likely requiring more inspectors and dedicated staff, it is foreseeable that this will create an even greater need for a formal PSM program. CSB maintains that this recommendation is still applicable.

C. Board Analysis and Decision

The Governor and Legislature of Washington have taken direct action towards implementing the recommendation. Unfortunately, the Senate ultimately did not consider L&I and the Governor's request in its 2015-2017 budget. The Senate should have approved the budget item in accordance with the CSB's recommendation. The Governor and L&I are commended for requesting additional funds, and the Board encourages the Governor and Legislature to resubmit a request for a "Chemical Hazards Prevention Team" for the 2019-2021 long budget session. The Board voted to designate the status of CSB Recommendation No. **2010-8-I-WA-R06** as "**Open – Acceptable Response or Alternative Response.**"