

Report to the Richmond City Council and Contra Costa County Board of Supervisors  
Joint Committee on the Industrial Safety Ordinance Revisions to Address the Chemical  
Safety and Hazard Investigation Board's Recommendations  
August 15, 2013

On April 19, 2013, the Chemical Safety and Hazard Investigation Board (CSB) issued their interim report on their investigation of the August 6, 2012 Chevron Richmond Refinery fire. The report had virtually the same recommendations to the County's Board of Supervisors and the Richmond City Council. On August 2, 2013, a joint committee of the Richmond City Council Members and the Contra Costa County Board of Supervisors met and reviewed the draft Industrial Safety Ordinance revisions and recommended changes to the draft. The changes to the draft Industrial Safety Ordinances were made to address the Joint Committee's recommendations.

The draft Industrial Safety Ordinance revisions with the Joint Committee's recommendations were reviewed on August 5, 2012 by a working group that includes representatives from the community, industry, USW, City of Richmond staff, and Contra Costa Hazardous Materials staff. Additional recommended changes from this meeting were made to the proposed Industrial Safety Ordinance revisions. Attached to this report is a copy of the changes made by the Joint Committee on August 2 and the working group on August 5. The recommended changes from these two meetings are noted by comments. Below is a list of the additional recommendations that the working groups has submitted since the August 5 meeting with recommended actions.

**Comment 1:** Section 450-8.004 (a)(6) - In the meeting, I understood that the Chemical Safety Board recommendations included the establishment of a database for reports from different regulatory agencies to create a central location the agencies could assess.

I think it is a good idea and suggest that it be included in number 6. It should also identify who will create the database and a time line for completion. – Ralph Sattler

**Recommendation:** Not to include this in the revised Industrial Safety Ordinance.

**Reason:** The purpose of this recommendation has merit but the Board of Supervisors and the Richmond City Council have no authority to require agencies that do fall under their jurisdiction to submit documents to Contra Costa Health Services. The Governor's Working Group on Refinery safety has recommended that such a data base be established under Cal/OSHA and the Secretary of CalEPA is establishing a Task Force to look at this and other recommendations from the Governor's Working Group on Refinery Safety.

**Comment 2:** Section 450-8.016(d)(3)(A) Strengthen the requirement for use of inherently safer systems by making it harder to claim that it is "economically infeasible".

For example, how can a company say that making an investment for safety that can't be met any other way is economically infeasible when its CEO is receiving millions of dollars in bonuses? – Marilyn Langlois

**Recommendation:** Not to include this in the revised Industrial Safety Ordinance. Include additional language if the inherently safer system is not implemented because of a claim of financial infeasibility, that would require additional safeguards be added that would reduce the overall risk to the same extent or greater as that of the implementation of the inherently safer system.

**Reason:** The proposed ordinance revisions requires that inherently safer systems implemented “. . . to the greatest extent feasible. If a stationary source concludes that an inherently safer system is not feasible, the basis for this conclusion shall be documented in meaningful detail. . . . A claim of “financial infeasibility” shall not be based solely on evidence of reduced profits or increased costs, but rather shall include evidence that the financial impacts would be sufficiently severe to render the inherently safer system recommendation economically impractical, such that the process unit can no longer be financially operated. The financial determination will include the following factors (i) capital investment, (ii) product quality, (iii) total direct manufacturing costs, (iv) operability of the plant, and (v) demolition and future clean-up and disposal costs.” This would require inherently safer systems be implemented unless the regulated source can show that they cannot operate this process unit and would have to discontinue the operation of the process unit or not build a process unit because of the economics. Reducing the hazards that are presented are typically the best means to reduce the risk to the community, but there are other means to reduce the risk that may be acceptable. For an example, it is inherently safer to drive than to fly, but safeguards have been put in place when flying that reduces the overall risk to the commuter above that of driving a car.

**Comment 3:** Section 450-8.016(a)(9)(H) Include a requirement to document inherently safer systems when there has been excessive flaring. If ISS are in fact in use, the root causes of needing to do emergency flaring should be greatly reduced. Even though BAAQMD addresses this, it should be covered in our ISO, too. – Marilyn Langlois

**Recommendation:** No recommendation

**Reason:** For accidents that require a root cause analysis, the revised ordinance would require the regulated source to perform an inherently safer systems analysis. The revised ordinance does not require an inherently safer system analysis if the reason that this incident is considered a Major Chemical Accident or Release is because of excess flaring. A definition for excess flaring has been included in the proposed recommendations. The reason for not including excess flaring in many cases would be redundant to what is already being required under the Bay Area Air Management District.

**Comment 4:** Section 450-8.016(a)(6)(F) The definition and requirements for inherently safer systems should explicitly include the quality of crude oil that is processed. We now know that switching to higher sulfur crude can lead to the danger of corrosion and fires, whereas lower sulfur crude oil is available and should be used. Hence it is certainly feasible to process raw materials that are inherently safer. – Marilyn Langlois

**Recommendation:** Not to include this in the revised Industrial Safety Ordinance

**Reason:** The proposed requirement for Management of Change states: *“Management of Change reviews for a new process or a project involving significant modification of existing processes or facilities that result in a significant change in the process configuration or process chemistry shall evaluate and document the use of inherently safer systems as specified in Section 450-8.016(d)(3)(B)(ii)”*. Making a change in the crude slate is a significant change in the process chemistry and potentially the process configuration and as such is the proposed ordinance revisions already require an inherently safer system review.

**Comment 5:** Section 450-8.014(v) Refineries agree need to include def. for significant, but we are currently researching alternative definition which may already be in other regulations or recognized publications. - WSPA

**Recommendation:** If there is a better definition, especially that is already used in existing language, suggest using that language

**Comment 6:** Section 450-8.016(a)(6)(F) Change the wording from “No later than April 30, 2014. . .” to “Effective April 30, 2014. . .” - WSPA

**Recommendation:** Accept this change

**Comment 7:** Section 450-8.016(a)(6)(F) Remove the phrase “. . . that result in a significant change in the process configuration or process chemistry. . .” - WSPA

**Recommendation:** Do not accept this recommendation

**Reason:** This phrase adds understanding when inherently safer systems are to be included in the Management of Change process.

**Comment 8:** Section 450-8.016(a)(9)G) Change the wording from “For incidents that occur later than April 30, 2014. . .” to “Effective April 30, 2014. . .” - WSPA

**Recommendation:** Do not accept this recommendation

**Reason:** The phrase “For incidents that occur later than April 30, 2014. . .” provides more clarity

**Comment 9:** Section 450-8.016(a)(9)G) reword this section for additional clarity from: “. . .stationary sources shall evaluate and document the use of inherently safer systems on covered process(es) that had, or could have reasonably resulted in, a Major Chemical or Accidental Release of a regulated substance as specified in Section 450-8.016(d)(3)(B)(iii). This requirement does not apply to incidents that are classified as a Major Chemical or Accidental

*Release due to excessive flaring.” to “for those incident investigations that could have reasonably resulted in a catastrophic release, stationary sources shall evaluate and document the use of inherently safer systems as specified in Section 450-8.016(d)(3)(B)(iii) for those recommendations from incident investigations that specify a project involving significant modification of existing processes, or facilities. This does not apply to incidents that are classified as a Major Chemical or Accidental Release due to flaring.” WSPA*

**Recommendation:** Accept this recommendation

**Reason:** This rewording does add clarity as to when to apply an inherently safer systems evaluation.

**Comment 10:** Section 450-8.016(a)(13)(D)(ii) Section 450-8.016(a)(6)(F) Change the wording from “No later than April 30, 2014. . .” to “Effective April 30, 2014. . .” - WSPA

**Recommendation:** Accept this change

**Comment 11:** Section 450-8.016(a)(13)(D)(ii) Revise the wording from “. . . each regulated stationary sources shall develop on-going and site specific leading and lagging indicators that will show the effectiveness of *the* process safety *program elements*, including and not limited to the mechanical integrity program element.” to “. . .each regulated stationary sources shall develop on-going and site specific leading and lagging indicators that will show the effectiveness of *their* process safety *performance* , including and not limited to the mechanical integrity program element.” - WSPA

**Recommendation:** Accept this change

**Reason:** This change makes the subsection more accurate

**Comment 12:** Section 450-8.016(c)(4) Change the wording from “For incidents that occur later than April 30, 2014. . .” to “Effective April 30, 2014. . .” - WSPA

**Recommendation:** Do not accept this recommendation

**Reason:** The phrase “For incidents that occur later than April 30, 2014. . .” provides more clarity

**Comment 13: Comment 9:** Section 450-8.016(c)(4) reword this section for additional clarity from: “. . . stationary sources shall evaluate and document the use of inherently safer systems on covered process(es) as part of the Root Cause Analysis investigation process as specified in Section 450-8.016(d)(3)(B)(iii) for incidents that had or could have reasonably resulted in a Major Chemical Accident or Release . This requirement does not apply to those incidents that were classified as a Major Chemical Accident or Release due to excessive flaring activities..” to “for those incident investigations that could have reasonably resulted in a catastrophic release, stationary sources shall evaluate and document the use of inherently safer systems as specified in Section 450-8.016(d)(3)(B)(iii) for those recommendations from incident investigations that specify a project involving significant modification of existing processes, or facilities. This does not apply to incidents that are classified as a Major Chemical or Accidental Release due to flaring.” - WSPA

**Recommendation:** Accept this recommendation

**Reason:** This rewording does add clarity as to when to apply an inherently safer systems evaluation

**Comment 14:** Section 450-8.016(d)(3)(A) Recommend reverting back to the original language “. . . *but rather shall include evidence that the financial impacts would be sufficiently severe to render the inherently safer system recommendation as impractical.*” We understand that this language should be preserved as agreement with CBE from previous ISO revision. In addition recommend removing the additional details regarding the financial evaluation. In lieu, refinery members will provide County high level overview of the elements that go into inherently safer system review, including the financial aspect that could be used in educating public on this topic. - WSPA

**Recommendation:** No recommendation

**Reason:** The Joint Committee recommended additional clarity of when something would be financial impractical.

**Comment 15:** Section 450-8.016(d)(3)(B) Minor changes to clarify wording and better distinguish the 5 areas where inherently safer systems will be evaluated, as well as clarify application of inherently safer systems is for mitigation items from these 5 areas. Paragraph B would read as follows: (the wording changes are shown as redline strikeouts) *“For all covered processes, the stationary source shall evaluate and document the use of inherently safer systems (i) in the development and analysis of mitigation items resulting from a process hazard analysis, (ii) ~~when performing~~ management of change on a covered process where there is a significant change in the process configuration or process chemistry as required under Section 450-8.016(a)(6)(F) effective April 30, 2014, (iii) ~~associated with~~ incident investigations as required under Sections 450-8.016(a)(9)(H) and 450-8.016(c)(4) for incidents that occur after April 30, 2014, (iv) ~~during the~~ Process Hazard Analysis or as a separate Inherently Safety System Analysis of existing processes at the same interval for performing Process Hazard Analysis, and (v) ~~in~~ the design and review of new processes and facilities.”* - WSPA

**Recommendation:** Accept the recommendation

**Comment 16:** Section 450-8.016(d)(5) Change the wording from “No later than April 30, 2014. . .” to “Effective April 30, 2014. . .” - WSPA

**Recommendation:** Accept this change

**Comment 16:** While the ISO Ad Hoc has requested the language be returned to them on August 15 – I am not sure that operating on such short timeframes to review, analyze and comment on the draft language is in the public interest. We are doing our best to provide industry input as you requested, but we may have additional thoughts and concerns to express in the future. - WSPA