



Chemical Safety and Hazard Investigation Board

Office of General Counsel

Memorandum

To: Board Members

From: Richard C. Loeb *Richard C. Loeb*

Cc: Leadership Team
Rachael Gunaratnam
Christina Morgan

Subject: Board Action Report – Notation Item 937

Date: October 10, 2012

On September 20, 2012, the Board approved Notation Item 937, thereby designating Recommendation 2011-H-1-R04, to the Railroad Commission of Texas (from the Oil and Gas Production Site Safety Study), with the status of Open – Unacceptable Response.

The Board also voted to adopt the Recommendations Status Change Summary presented in Attachment 2 to Item 937, and to authorize the publication of that summary on the CSB public web site.

Voting Summary – Notation Item 937

Disposition: APPROVED

Disposition date: September 20, 2012

	Approve	Disapprove	Calendar	Not Participating	Date
R. Moure-Eraso	X				9/6/2012
M. Griffon	X				9/20/2012



U.S. Chemical Safety and Hazard Investigation Board

MEMORANDUM

September 6, 2012

To: Mark Griffon
From: Rafael Moure-Eraso
Cc: Daniel Horowitz
Manuel Gomez
Rachael Gunaratnam
Mark Kaszniak
Christina Morgan

Subject: Notation Items 936 – 938

Attached for your review and vote are Notation Items 936 through 938. These items provide for the approval of status changes to several recommendations, based upon evaluations of recipient responses prepared by the Office of Recommendations. These response evaluations and proposed status changes have been reviewed and approved by the Director of Recommendations.

These items now also provide for the adoption of a summary document (attached to each item) explaining the Board's decision on each status change, which will be published on the CSB web site upon Board approval. Unlike the recommendation response evaluations, which are strictly internal documents, the recommendation status change summaries are intended for public release. These summaries are a new undertaking of the Office of Recommendations to provide additional transparency for the recommendations process.

You may direct any questions about these items to the Office of Recommendations staff members named in the evaluation reports, which are attached to each item. Additional background information and documentation for each of the recommendations covered by these notation items is posted on the G Drive at: G:\Recommendations\Recommendations for Board Vote\2012-08-23. For your convenience, you will also receive an e-mail with the links to the background information and documentation. Please note that your computer must be connected to the CSB network either at the office or via VPN in order to access these files.

Please return your completed vote sheets to Chris Kirkpatrick no later than the close of business on September 20, 2012. Thank you for your attention to these items.

**U.S. Chemical Safety and
Hazard Investigation Board**

Hon. Rafael Moure-Eraso
Chairperson

Hon. Mark Griffon
Board Member



**CHEMICAL SAFETY AND HAZARD INVESTIGATION BOARD
MEMBER VOTING RECORD**

Notation No.: 937

Voting Period: September 6 – September 20, 2012

Subject: Status Change – Recommendation to the Railroad Commission of Texas (2011-H-1-R04) from the Oil and Gas Production Site Safety Study (2011-H-1)

Whereas,

1. The Board is authorized by 42 U.S.C. § 7412(r)(6)(C)(i) to “investigate . . . and report to the public in writing the facts, conditions, and circumstances and the cause or probable cause of any accidental release resulting in a fatality, serious injury or substantial property damages;”
2. The Board is also authorized by 42 U.S.C. § 7412(r)(6)(F) to “conduct research and studies with respect to the potential for accidental releases . . . where there is evidence which indicates the presence of a potential hazard or hazards;”
3. The Board is further authorized by 42 U.S.C. § 7412(r)(6)(C)(ii) to “issue periodic reports to the Congress, Federal, State and local agencies, including the Environmental Protection Agency and the Occupational Safety and Health Administration, concerned with the safety of chemical production, processing, handling and storage, and other interested persons recommending measures to reduce the likelihood or the consequences of accidental releases and proposing corrective steps to make chemical production, processing, handling and storage as safe and free from risk of injury as is possible;”
4. The Board has issued such a recommendation to the **Railroad Commission of Texas** based upon the findings of the Board’s Oil and Gas Production Site Safety Study;
5. Consistent with Order 022, the Board is to vote on changes to the status of recommendations;
6. The staff of the Office of Recommendations proposes that the status of the above named recommendation should be changed, as described in the attached internal Recommendation Response Evaluation (Attachment 1 to this item); and
7. The Recommendations staff further proposes that the attached Recommendations Status Change Summary (Attachment 2 to this item) be adopted and published on the CSB web site.

[continues on next page]

Notation No.: 937
Subject: Status Change – Recommendation 2011-H-1-R04

[continued from preceding page]

Therefore, pursuant to its authority, the Board hereby votes:

- a. To designate **Recommendation 2011-H-1-R4** with the status of **Open - Unacceptable Response**.
- b. To adopt the Recommendations Status Change Summary presented in Attachment 2 to this item, and authorize the publication of that summary on the CSB public web site.

_____ I **APPROVE** this notation item **AS PRESENTED**.

_____ I **CALENDAR** this notation item for discussion at a Board meeting.

_____ *Some of my concerns are discussed below or on the attached memorandum.*

_____ I **DISAPPROVE** this notation item.

_____ *A dissent is attached.*

_____ *I will not file a dissent.*

_____ I am **NOT PARTICIPATING**.

Date: _____

Member: _____

ATTACHMENT 2



U. S. Chemical Safety and Hazard Investigation Board

RECOMMENDATIONS STATUS CHANGE

SUMMARY

Report:	Public Safety at Oil and Gas Storage Facilities
Recommendation Number:	2011-H-1-R4
Date Issued:	September 30, 2011
Recipient:	Railroad Commission of Texas (RRC-TX)
New Status:	Open – Unacceptable Response
Date of Status Change:	

Recommendation Text:

Amend state oil and gas regulations to:

- a) *Protect storage tanks at exploration and production sites from public access by requiring sufficient security measures, such as full fencing with a locked gate, hatch locks on tank man ways, and barriers securely attached to tank external ladders and stairways.*
- b) *Require hazards signs or placards on or near tanks that identify the fire and explosion hazards using words and symbols recognizable by the general public.*
- c) *Require the use of inherently safer tank design features such as flame arrestors, pressure vacuum vents, floating roofs, vapor recovery systems or an equivalent alternative, to prevent the ignition of a flammable atmosphere inside the tank.*

Board Status Change Decision:

A. Rationale for Recommendation

This recommendation was issued following an investigation of three fatal incidents (Carnes, MS; Weelteka, OK; and New London, TX) in 2009 and 2010, involving teenagers and young adults gathering at rural unmanned oil and gas storage sites that lacked tank security and design features which might have deterred public access, or minimized the risk of explosion, such as fencing, signs warning of the hazards or other measures. As part of its investigation, the CSB identified a total of 26 similar incidents between 1983 and 2010, which resulted in 44 fatalities and 25 injuries. Of these 26 incidents, 7 (27%) occurred in Texas, resulting in 12 fatalities and 8 injuries.

The Railroad Commission of Texas (RRC-TX) regulates oil and gas site safety for the state, and the CSB concluded that RRC-TX rules did not require fencing, warning signs, or locked tank hatches for oil storage tanks (apart from tanks with hydrogen sulfide hazards) and did not have requirements for tank design features to prevent an internal vapor explosion. The recommendation was issued to RRC-TX to address these issues.

B. Response to the Recommendation

In April 2012, the RRC-TX formally responded to the CSB recommendation by declining to impose new security and design measures for oil tank storage sites. The Commission argued that the number of incidents identified by the CSB study did not demonstrate a need for new

measures based on potential risk, and also that the teenagers and young adults had entered the sites without authorization. The Commission also decided against requiring hazard warning signs because it judged that existing OSHA regulations already require such signs and for the RRC-TX to require such signs would be duplicative and result in confusion and increased cost to the state. Finally, the Commission declined to implement safer tank design features because it felt that proposed EPA and TCEQ regulations for increased control of air emissions for oil storage tanks would incorporate some of the safety requirements that the CSB recommended.

C. Board Analysis and Decision

The Board reviewed the response provided by the RRC-TX and noted the following:

- The Commission has neither proposed any action that would meet the intent of the security protection provisions contained in the CSB recommendation, nor provided sufficient justification for the Board to reclassify this recommendation in any other manner.
- As the CSB noted in its report, following existing OSHA hazard communication regulations would not ensure that the warning signs at oil sites would be understood by the general public. OSHA allows various labeling systems to be used for hazard warnings on storage tanks; the most common is the National Fire Protection Association's "Hazard Diamond." This system uses numeric codes and other symbols that are not recognizable to the general public, especially teenagers and young adults with little or no work experience. Thus OSHA requires workers to be trained in these systems, training that the general public does not receive. Thus the CSB's recommendation was not duplicative but called for requiring new hazard warnings that are easily understood by the general public. The RRC-TX has proposed no action to address the hazard warning provisions contained in the CSB recommendation.
- While emission control retrofits to oil storage tanks may prove to have some safety benefits, their primary purpose is to prevent environmental releases in order to enhance ambient air quality. Any claims that they provide an increased level of safety for oil storage tanks will need to be independently demonstrated. RRC-TX has provided no such evidence in its response, nor is it involved in the effort to get these devices installed. Moreover, as these are merely proposed requirements, they are subject to change based on public comments and executive and judicial reviews, and the timetable for their implementation is uncertain.

The RRC-TX responded by expressing disagreement with the need outlined in the CSB recommendation. It has made no effort to seriously address any of its provisions, and has provided insufficient justification as to why the recommendation status should be favorably changed. Therefore, the Board votes to change the status of 2011-H-1-R04 to "Open – Unacceptable Response."