

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

2175 K Street, NW • Suite 650 • Washington, DC 20037-1809
Phone: (202) 261-7600 • Fax: (202) 261-7650
www.csb.gov

Hon. Rafael Moure-Eraso
Chairperson

Hon. John S. Bresland
Board Member

Hon. Mark Griffon
Board Member



**In reply, please refer to:
Rec. Nos. 2010-5-I-TX-R3&4**

Taylor Eighmy, Vice President for Research
Bob Smith, Provost and Senior Vice President
Texas Tech University
Lubbock, Texas 79409

OCT 24 2011

Dear Dr. Eighmy and Dr. Smith:

On January 7th, 2010, a fifth-year graduate student in the Chemistry and Biochemistry Department at Texas Tech University (TTU) in Lubbock, Texas, was critically injured after the chemical he was working with unexpectedly detonated. The U.S. Chemical Safety and Hazard Investigation Board (CSB) investigated this incident and found the following systematic deficiencies at TTU: the physical hazard risks inherent in the research were not effectively assessed, planned for, or mitigated; the university lacked safety management accountability and oversight; and previous incidents with preventative lessons were not documented, tracked, and formally communicated. Therefore, the CSB voted on September 30, 2011, to issue the following recommendations to TTU:

Recommendation no. 2010-5-I-TX-R3:

Revise and expand the university chemical hygiene plan (CHP) to ensure that physical safety hazards are addressed and controlled, and develop a verification program that ensures that the safety provisions of the CHP are communicated, followed, and enforced at all levels within the university.

Recommendation no. 2010-5-I-TX-R4:

Develop and implement an incident and near-miss reporting system that can be used as an educational resource for researchers, a basis for continuous safety system improvement, and a metric for the university to assess its safety progress. Ensure that the reporting system has a single point of authority with the responsibility of ensuring that remedial actions are implemented in a timely manner.

A more detailed rationale for these recommendations and all recommendations issued pursuant to this investigation can be found in the enclosed case study, which is also available on our website at www.csb.gov.

The CSB assigns a status to its recommendations depending on the action(s) proposed and taken by recipients. Briefly, the recommendation status designates a recommendation as either open or closed. All new recommendations are designated with the status "Open- Awaiting Response." Where a recipient indicates to the Board a planned action that would satisfy the

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

objective of the recommendation upon completion, the Board may vote to advance a recommendation to the interim status of "Open- Acceptable Response or Alternate Response." Before a recommendation may be designated with the status "Closed- Acceptable Action," the CSB requires that the recipient provide adequate documentation that the recommendation has been implemented. The status of all recommendations is posted on the CSB website, where more information on the Recommendations process is also available (see "Frequently Asked Questions" under the Recommendations tab on the webpage).

To facilitate advancement and/or closure of this recommendation, Ms. Christina Morgan, Recommendations Specialist, will be in touch with you or your representative regarding TTU's actions pursuant to the CSB's recommendation. In your response, kindly indicate the person on your staff who can serve as your point of contact.

The Board would appreciate a response regarding the actions that TTU has taken (or is contemplating taking) concerning these recommendations within 60 days of receipt of this letter.

If you have any questions or need further information, please have your staff contact Ms. Morgan at (202) 261-7642, or by e-mail at christina.morgan@csb.gov. In all future correspondence pertaining to this recommendation, please refer to recommendation numbers 2010-5-I-TX-R3 and R4, and copy Ms. Morgan.

Sincerely,



Rafael Moure-Eraso, PhD, CIH
Chairperson

Enclosure

CC (via e-mail): Alice M. Young, Associate Vice President for Research, TTU
Manuel Gomez, Director of Recommendations, CSB
Don Holmstrom, Investigations Supervisor, CSB
Cheryl MacKenzie, Investigator and Team Lead, CSB
Christina Morgan, Recommendations Specialist, CSB
Mary Beth Mulcahy, Investigator, CSB