September 2010 SCS Safety Newsletter

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Texas Tech Laboratory Incident:

On January 7th, 2010 a graduate student at Texas Tech was working to synthesize and characterize an energetic material, most likely nickel hydrazine perchlorate. The student synthesized a much greater quantity than instructed by his advisor. Because the final product was lumpy, the student placed the material into a mortar. The student believed the compound was safe when “wet,” so he added some hexane and - wearing safety goggles but working at a bench in the middle of the lab, with no blast shield - “very gently, very, very gently” used a pestle to try to break up the chunks, the student told Texas Tech environmental health and safety officers.

When the student thought he was done, he set down the mortar and took off his goggles. He decided to give the compound one last stir. The mortar exploded in his hands. The student “lost three digits on his left hand, severely lacerated his right hand, perforated his left eye, scratched his right eye and had superficial cuts to the parts of his body that were exposed,” says an investigation report prepared by Randy Nix, environmental health and safety director at Texas Tech.

The investigation efforts revealed a lack of attention to safety at Texas Tech at all levels – lab, department, and university. The incident has prompted changes in the University’s laboratory safety program.

For further information and a picture of the explosion see the entire C&EN article:
http://pubs.acs.org/cen/science/88/8834sci1.html
Changes in Biological Safety Cabinet (BSC) Certification:

Principal Investigators with laboratories containing Biological Safety Cabinets (BSCs) should have been notified by the Division of Research Safety regarding the change in campus procedure for scheduling certifications of BSCs.

The Division of Research Safety released the following statement:

“DRS is writing to inform you about a change in the campus procedure for scheduling certifications of biological safety cabinets (BSCs). The Division of Research Safety (DRS) has developed a BSC Inventory Database, which is a list of all BSCs on campus for use by Researchers and unit Safety Contacts to track the location and certification status of BSCs. The Inventory Database will automatically issue certification reminder emails on a monthly basis beginning three months in advance of the recertification due date. For most departments, a Safety Contact has been established (typically a facility manager or safety coordinator) who will coordinate the certification process. If no Safety Contact has been established for the unit, Principal Investigators will be responsible for contacting a vendor, scheduling certification, and updating certification status in the Inventory Database. DRS will continue to monitor certification status, but will no longer be involved in the certification process.”

Principal Investigators with BSCs should have access to the BSC Inventory Database. PIs wishing to schedule certification for BSCs can contact the SCS Safety Office. The SCS Safety Office will coordinate certification with the vendor and update the certification status in the BSC Inventory Database. Further questions regarding this process can be directed to eduvall@illinois.edu