
OWLinks is brought to you by the Workplace Safety and Health (WSH) Institute to enable leaders and professionals to keep abreast of the latest WSH developments and trends from around the world.

SPOTLIGHT

Inaugural WSH Institute Solutioning Session focuses on “Preventing Formwork Incidents”



On 28 March 2014, more than 65 invited participants from the formwork community participated actively to discuss on root causes of formwork incidents and brainstormed on possible solutions to prevent future formwork incidents.

Check out the [WSH Institute website](#) to view the participants in action!

In this issue, we feature interesting articles related to Chemical Safety. We hope you find these articles useful.

Articles Reviewed In This Issue:

1. [Safety and health in the use of chemicals at work](#)
2. [Benzene: Health-based recommended occupational exposure limit](#)
3. [Texas Tech University: Laboratory Explosion](#)
4. [Hazard surveillance: Residual chemicals in shipping containers](#)

Safety and health in the use of chemicals at work

Date of publication: February 2014

Source: Publications and technical tools, International Labour Organisation

Author: International Labour Organisation

Synopsis:

Chemicals are a critical part of many industrial processes to develop products that are important to global standards of living. However, controlling exposures to these chemicals in the workplace, as well as limiting emissions to the environment, are tasks that governments, employers and workers continue to struggle to address.

This report for the 2014 celebration of the [World Day for Safety and Health at Work](#) reviews the current situation regarding the use of chemicals and their impact in workplaces and the environment, including various national, regional and international efforts to address them. The report also presents the elements for establishing national and enterprise-level programmes that contribute to ensure the sound management of chemicals at work.

To read more, click [here](#).

Benzene: Health-based recommended occupational exposure limit

Date of publication: February 2014

Source: The Hague: Health Council of the Netherlands, 2014; publication no. 2014/03.

Author: Health Council of the Netherlands

Synopsis:

Benzene is a colourless liquid with a sweet odour, which is commercially produced from coal and petroleum sources. Benzene is used primarily in the chemical and pharmaceutical industries, as a starting material and intermediate in the synthesis of numerous chemicals. It is also used as a gasoline additive, since benzene increases the octane rating and reduces knocking. Human exposure to benzene increases risk of leukemia and is associated with blood and bone marrow toxicity. At high exposure levels, it may cause dizziness, convulsions, tremors and death.

This advisory report considers the implications of exposure to benzene, and recommends using a threshold approach and a health-based occupational exposure limit of 0.7 mg/m³ (0.2 ppm) for this substance.

To read more, click [here](#).

Texas Tech University: Laboratory Explosion

Date of publication: October 2011

Source: Case study, U.S. Chemical Safety and Hazard Investigation Board

Author: U.S. Chemical Safety and Hazard Investigation Board

Synopsis:

An explosion severely injured a graduate student at Texas Tech University in the chemistry department during the handling of a high-energy metal compound, nickel hydrazine perchlorate (NHP).

The investigations conducted by the Chemical Safety and Hazard Investigation Board revealed systemic deficiencies at Texas Tech University. The physical hazards of the chemical, nickel hydrazine perchlorate (NHP) were not effectively assessed, planned for or mitigated. There were insufficient safety management accountability and oversight by the principal investigators, the chemistry department and the university administration department. Additionally, previous similar laboratory incidents were not documented, tracked or communicated for the prevention of such accidents. The lessons learned from this incident would provide an opportunity for other academic institutions to re-examine their own laboratory safety policies and guidelines.

To read more, click [here](#).

Hazard surveillance: Residual chemicals in shipping containers

Date of publication: December 2012

Source: Publications and resources, Safe Work Australia

Author: Safe Work Australia

Synopsis:

High levels of residual chemicals in sealed shipping containers raise potential issues for worker health when shipping containers are unpacked. This research investigates worker exposures when unpacking shipping containers at retail warehouse or distribution centres in Australia. Exposures for workers who unpacked 76 shipping containers in Melbourne and Brisbane were measured using a combination of video exposure monitoring and gas sampling techniques. Self-reported health symptoms and self-reported work practices were also investigated.

To read more, click [here](#).

Other Useful Resources:

- [Chemical Waste Disposal](#) (Princeton University)
- [Chemicals](#) (Health and Safety Executive, United Kingdom)

