

## 3 safety at work

According to the International Labour Organisation (ILO), it was estimated that in 2002 approximately 2 million people were killed in work-related diseases and occupational accidents. Injuries caused by accidents lead to fatalities only when a number of contributing factors co-exist simultaneously. Fatal accidents are just the tip of the iceberg. Depending on the type of job some 500-2,000 smaller injuries take place for each fatality.

The following regulatory developments show that many countries continue to be committed to achieving a reduction of workplace accidents.

### ***Machinery & Work Equipment Safety***

The European Union is currently discussing a proposed Directive to review the so-called 'New Approach' on technical harmonisation and standardisation. The New Approach to technical harmonisation and standardisation launched by Council Resolution of 7 May 1985, provided a new framework for the harmonisation of national regulations for industrial products and established the following principles:

- Legislative harmonisation is limited to essential requirements that products placed on the Community market must meet, if they are to benefit from free movement within the Community.
- The technical specifications of products meeting the essential requirements set out in the Directives are laid down in harmonised standards.
- Application of harmonised or other standards remains voluntary, and the manufacturer may always apply other technical specifications to meet the requirements.
- Products manufactured in compliance with harmonised standards benefit from a presumption of conformity with the corresponding essential requirements.

Poland is still in the process of transposing EU-legislation into national legislation and with regard to machinery and work equipment, they implemented in 2002:

- an Ordinance on minimum health and safety requirements for the use of work equipment and
- an Ordinance on health and safety requirements for the operation of metal machining tools.

In a development in Germany, Ordinance on Company Safety consolidates a variety of Ordinances, thus simplifying the application of the legislation. The Ordinance on Company Safety contains requirements for:

- the use of work equipment,
- assessment and measures to be taken in explosive atmospheres,
- design of work equipment,
- training and checks of work devices, etc.

### ***Confined Spaces***

In Brazil, a proposed Regulatory Norm (NR) 31 which would regulate the safety and health of work in confined spaces is expected to be adopted towards the end of 2003. The proposed Regulatory Norm NR-31 would aim at establishing minimum requirements for the identification of confined spaces, their recognition, the monitoring and the control of existing risks in order to ensure the workers' safety and health.

The United States Occupational Safety and Health Administration (OSHA) issued a Technical Information Bulletin on 30 May 2002 outlining circumstances under which employers may have to comply with detailed job safety requirements related to confined space entry and respirator use when workers erect temporary enclosures such as tarps or plastic sheeting on or around hazardous areas of a job site.

### ***Welding and Cutting/Hot Work***

In August 2002, the Ministry of Labor of the Russian Federation adopted Decree 55/2002 detailing the industrial safety rules applicable to plasma flame treatment of metals. The scope of the rules cover low-temperature plasma welding, excluding high-frequency welding, plasma flame cutting of non-ferrous metals and their alloys, stainless, carbon and low-alloyed steels. The Rules are applicable to all type of activities that use the above processes.

### ***Lifting Equipment, Material Handling Equipment***

In France, a modification to the Labor Code of December 2002 aims at strengthening the requirements applicable to lifting equipment.

In Portugal, a Decree-Law of December 2002 introduces maintenance and inspection requirements for lifts, cargo lifts, mechanical staircases and moving walkways. Every owner of such an equipment must conclude a maintenance contract (simple or complete contract) with a lift maintenance company which is inscribed in a register at the General Directorate of Energy. Regular inspections of such equipment have to be carried out by the municipalities (or inspection bodies contracted by the municipalities) between every two and six years, depending on the type and location of the equipment.

Meanwhile, the United States Occupational Safety and Health Administration intends to update the standard on cranes and derricks which is over 30 years old.

### ***Fall Protection / Working at Heights***

In Australia, the WorkCover authority of Victoria issued proposed Regulations on the Prevention of Falls, together with a regulatory impact statement and draft Codes of Practice for the Prevention of Falls in General Construction and Housing Construction respectively. The objective of the draft Occupational Health and Safety (Prevention of Falls) Regulations would be to prevent incidents at workplaces involving falls of more than 2 metres and to prevent or reduce injury resulting from those falls. The draft Regulations were developed from comments received after the publication of an Issue Paper on Falls from Heights in 2000.



### ***Pressure Vessels***

With regard to pressure vessels, a series of legislation was adopted, mainly to update existing legislation.

In Hong Kong, the Boilers and Pressure Vessels (Amendment) Ordinance 2002 amend the Boilers and Pressure Vessels Ordinance (Cap. 56) and the Boilers and Pressure Vessels Regulations. It clarifies the provisions concerning certificates of competency for the operation of boilers and steam receivers.

In Malaysia, registered unfired pressure vessels listed in the Schedule to an Order adopted in June 2002 are exempted from the preparation for regular inspection. In Singapore, certain steam boilers are exempt from complying with some safety features required in section 36 of the Factories Act, but still require regular examinations by authorised boiler inspectors.

In Austria, during the course of 2002, the Ordinance on Liquid Gas and the Ordinance on the Storage of Pressure Gas Containers were adopted, while a proposed Ordinance on the Inspection of Pressure Equipment is still awaiting adoption.

### ***Electrical Safety***

During the course of 2002, in all parts of the world legislation on electrical safety was adopted. In Norway, Regulation No. 1323 on registration of companies that plan, operate or maintain electric installations (Registration regulations) obliges companies operating in the field of planning, operating, repairing or maintenance of electric installations to be registered in the Directorate for Fire and Electrical Safety as of 1 January 2003 (1 January 2004 for already existing companies).

In Singapore, the Electricity (Electrical Workers) Regulations 2002 and the Electricity (Electrical Installations) Regulations 2002 were adopted pursuant to the Electricity Act 2001 modernising the system of electrical safety.

In South America, a Technical Regulation on Electrical Installations was drafted in Colombia, while in Peru a Proposal for a Standard on mid-tension electrical installations is still under discussion.

### ***Personal Protective Equipment***

When it comes to personal protective equipment, in Poland an Ordinance establishing the minimum requirements to be met by Personal Protective Equipment put on the market in Poland (Dz.U. 2002, No 4, item 37) transposes Directive 89/686/EEC

of 21 December 1989 on the approximation of the laws of the Member States relating to personal protective equipment.

In Norway, Guidelines on the Regulation No. 1425 of 24 May 1993 on use of personal protective equipment (PPE) at the workplace aims at providing clarifications to different paragraphs of the Regulation clarifying its scope and giving detailed information on employer's responsibilities, requirements for personal protective equipment and on the use and maintenance of this equipment.

In the United States, proposed amended regulations on respiratory protection for workers are currently under discussion.

## **2002-2003 Regulatory Developments**

The following is a list of regulatory developments related to safety and health at work that occurred in 2002 and the first half of 2003. The overview is taken from the EPC-Update. The ID-number preceding each reference refers to the corresponding database record of the EPC-Update. For more details on any of these developments one can subscribe to the "EPC-Update" which provides an abstract of each development. A more detailed two-page summary and analysis of each initiative is also available via this service.



### **EPC-Update Record ID • Country • 2002-3 Regulatory/Policy initiative**

EU: Consultation document to review new approach on [\[ID 4976\]](#)

Germany: Ordinance on company safety adopted technical harmonisation and standardisation [\[ID 5315\]](#)

Germany: Ordinance on company safety adopted [\[ID 5315\]](#)

Ireland: Adopted Code of Practice on lift truck operator training [\[ID 5142\]](#)

Russia: Adopted industrial safety rules on the use of plasma flame welding and cutting [\[ID 5437\]](#)

France: Decree on the use of lifting and mobile equipment [\[ID 2229\]](#)

Portuga: Decree-Law on maintenance and inspection of lifts adopted [\[ID 5556\]](#)

Italy: Amendments to the Decree on safety of lifts [\[ID 2793\]](#)

UK: Consultation on Proposed Carriage of Dangerous Goods (Amendment) Regulations 2003 [\[ID 2178\]](#)

UK: Adopted Personal Protective Equipment Regulations 2002 [\[ID 4126\]](#)

Austria: Ordinance on Liquid Gas adopted [\[ID 5560\]](#)

Austria: Ordinance on the storage of pressure gas containers adopted [\[ID 5562\]](#)

Austria: Proposed Ordinance on the Inspection of Pressure Equipment [\[ID 5430\]](#)  
 Norway: Obligatory registration for companies that plan, operate and maintain electric installations [\[ID 5598\]](#)  
 Norway: Guidelines for the Regulation on use of personal protective equipment at the workplace adopted [\[ID 4961\]](#)  
 Spain: Regulation on low voltage electricity adopted [\[ID 5447\]](#)  
 Poland: Adopted Ordinance on minimum safety requirements for Personal Protective Equipment [\[ID 4942\]](#)  
 Czech Republic: Regulation on the protection of the health of employees at work amended [\[ID 4673\]](#)  
 South Africa: Draft Electrical Installation Regulation [\[ID 5235\]](#)  
 South Africa: Proposed Replacement of Compulsory Specification for Breathing Apparatus [\[ID 5033\]](#)  
 New Zealand: Draft revised Forklift Code of Practice [\[ID 5444\]](#)  
 New Zealand: Draft revised Boilers Code of Practice [\[ID 5443\]](#)  
 Australia: Victoria: Draft prevention of falls from heights Regulations [\[ID 3815\]](#)  
 Hong Kong: Regulation on Loadshifting Machinery comes into effect [\[ID 3766\]](#)  
 Hong Kong: Boilers and Pressure Vessels legislation amended [\[ID 4401\]](#)  
 Singapore: Factories Examination and Test of Steam Boilers Order 2002 adopted [\[ID 5521\]](#)  
 Singapore: Electrical workers regulations 2002 adopted [\[ID 5587\]](#)  
 Singapore: Electricity (Electrical Installations) Regulations 2002 adopted [\[ID 5589\]](#)  
 India: Mobile Pressure Vessels (Unfired) Rules, 1981 amended [\[ID 5481\]](#)  
 Malaysia: Adopted exemptions for certain types of unfired pressure vessels from inspection requirements [\[ID 4822\]](#)  
 Indonesia: General requirements on electrical installations in work places amended [\[ID 5502\]](#)  
 USA: OSHA Considering new forklift seat belt policy [\[ID 5621\]](#)  
 USA: OSHA reviewing mechanical power press standard to determine possible changes [\[ID 5474\]](#)  
 USA: Announced: New program for the reduction of amputations with an emphasis on targeting specific machinery [\[ID 4883\]](#)  
 USA: OSHA technical information bulletin on confined space entry and respirator use concerning temporary enclosures [\[ID 5460\]](#)  
 USA: Published: standards for floor and wall openings, stairs and railing systems [\[ID 5469\]](#)  
 USA: OSHA reviewing excavation standard to determine possible changes [\[ID 5473\]](#)  
 USA: Under development: update of OSHA cranes and derricks standard [\[ID 5463\]](#)  
 USA: Published: standards for floor and wall openings, stairs and railing systems [\[ID 5469\]](#)  
 USA: Issued: compliance guidance for steel erection standard [\[ID 4994\]](#)  
 USA: Proposed: New regulations on respiratory protection for workers [\[ID 5620\]](#)  
 USA: Issued: OSHA technical information bulletin on confined space entry and respirator use concerning temporary enclosures [\[ID 5460\]](#)  
 Brazil: Proposed NR-31 on confined spaces issued [\[ID 5564\]](#)  
 Colombia: Technical Regulation on Electrical Installations drafted [\[ID 5205\]](#)  
 Peru: Proposal for a Standard on mid-tension electrical installations [\[ID 5259\]](#)  
 Mexico: Standard on minimum safety requirements for electrical conductors adopted [\[ID 4460\]](#)

## Web-links

The quantity of interesting information that is being made available on internet is growing every day. For the EHS Professional internet has become an important tool for finding more information on the issues of concern. The following overview of interesting websites is not intended to be exhaustive. It however is intended to point at some of the more interesting websites on Safety at Work and Process Safety.

### International Labour Organisation

<http://www.ilo.org/public/english/protection/safework/index.htm>

Web-site of the International Labour Organisation (ILO) with information on a programme on safety and health at work and the Environment (SafeWork). This programme aims at developing preventive policies and programmes to protect workers in hazardous occupations and sectors, etc.

### US-EU OSH Cooperation

<http://www.osha.gov/us-eu/>

Web-site on the US/EU Cooperation on Workplace Safety & Health with links to both Occupational Safety and Health Administration (OSHA) and the EU European Agency for Health and Safety at Work and a vast array of information on all issues in relation to workplace health and safety.

### Australia NOHSC

<http://www.nohsc.gov.au/newsandwhatsnew/mediareleases/mr-29112002.htm>

Web-site of the National Occupational Health & Safety Commission (NOHSC) of the Commonwealth of Australia with OHS standards on which subsequently legislation adopted by the six Australian States and two Territories are based.

### WorkCover Australia

[http://workcover.cadre.com.au/index\\_1st.html](http://workcover.cadre.com.au/index_1st.html)

Interactive multimedia internet site to help young people when they first go to work developed by New South Wales WorkCover Australia. On line test on safety knowledge.

### Canadian Centre for Occupational Health and Safety

<http://www.ccohs.ca/>

Web-site of The Canadian Centre for Occupational Health and Safety (CCOHS) promoting a safe and healthy working environment by providing information and advice about occupational health and safety.