



Getty Images/Monty Rakusen/Cultura

operations. Hence the new campaign, which EU Commissioner for Employment, Social Affairs and Inclusion László Andor says is aimed at “cutting all work-related accidents in the EU by 25%”.

Andor observes that poor maintenance procedures raise the risk potential of workplace incidents. Making his point at the launch, he referred to the Piper Alpha disaster of 1988, which saw the North Sea oil and gas platform turned into a blazing inferno in minutes, killing 167 workers. It was, he said, “a tragic example of the potential consequences of inadequate maintenance”.

Like similar campaigns before it, this one hopes to make a difference by raising awareness of maintenance-related risks. Takala says that, over the next two years, events will be organised in European member states, starting with the European Good Practice Awards, which will reward examples of safe maintenance. Other highlights, he says, will include two European Weeks for Safety and Health at Work in October this year and next.

It’s all undoubtedly worthwhile stuff: clearly, without awareness of the hazard, nothing is likely to change. However, the issue for plant engineers and plant managers alike – given that the vast majority already work with what may reasonably be considered good health and safety processes – is what precisely should good health and safety in

Regulating **safety**

Plant engineers and managers bear a grave responsibility when it comes to health and safety. Brian Tincham examines what’s available to help them do better

On the World Day for Safety and Health at Work, at the end of April, the European Agency for Safety and Health at Work (EU-OSHA) launched a new healthy workplaces campaign for this year and next – this time promoting safe maintenance. Why specifically maintenance? Because, in some EU countries, as many as 20% of all workplace accidents are connected with work on plant, rising to more than half in some industry sectors, according to Dr Jukka Takala, director of EU-OSHA.

Launching the scheme at the EC’s headquarters in Brussels, Takala made the point that maintenance is essential to prevent workplace risks, but can itself be a high risk activity for the engineers and technicians doing the work. Indeed, he said that, across Europe, no fewer than 10–15% of all fatal accidents at work are attributable to maintenance

today’s workplace look like? Or perhaps, more directly, what are the key components for getting it right and so preventing the continuing personal tragedies, as well as the corporate cost and humiliation of the ensuing inquiries and court cases?

New legislation

Before exploring those, it’s worth just touching on the legislation here – primarily to ensure that readers understand their increasing liabilities beyond the dictates of the Health & Safety at Work etc Act. Chris Green, a partner specialising in health, safety and environmental law at solicitors Weightmans LLP, warns of several recent changes. “Most prevalent for company directors is the Health and Safety (Company Director Liability) Bill 2010, [which] seeks to impose a specific duty on directors to be responsible for, and involved in, safety management within their organisation,” he advises.

“At the moment, no direct duty arises just from being a director of a company, but, if the bill becomes law, it will oblige directors personally to take some positive action,” he says. Either way, plant managers and senior engineers found wanting

will wish they had taken the provisions of existing health and safety law seriously. "Under the Health and Safety (Offences) Act 2008, individuals can [already] be imprisoned for breaching safety laws. Liability can attach, even if an employer only causes safety risks – whether or not an accident in the workplace occurs or is fatal, and where the level of negligence is not considered gross," explains Green.

So, with minds thus focused, let's now return to the components of good health and safety – building beyond common practice. Steve Pointer, head of health and safety policy at the EEF (the manufacturers' organisation), first reverts to the European safety theme. "Maintenance is a big issue, in terms of causing accidents and ill health, but also making organisations vulnerable to claims," says Pointer, citing electrical work, machinery guards and working at height as among key problem areas. "So HSE, particularly in manufacturing, intends to look at maintenance practices and documentation during their routine inspections," he adds.

Out of the ordinary

He accepts that most operations have conducted risk assessments, but argues that some of the maintenance activities will be exceptional. "That means those in charge should be running new risk assessments and checking competence.

Remember, if work is out of the ordinary, there may not be time to send people on a course – so managers need to think ahead. They also need to monitor how tasks are carried out in practice. It's no longer acceptable just to train your people and then forget about it."

For Pointer, the central issue here is leadership. "Help is available, from the Institute of Directors and HSE, on getting the board engaged – and this is important, because it does make a big difference," he insists. However, our EEF man stops short of confirming a need for new legislation. "There's a lot of pressure from trades unions and campaign groups for new regulations, but EEF's position is that legislation for health and safety offences is already there, with the threat of imprisonment since 2009, not just fines. That said, we do want to help companies lead their health and safety initiatives."

Pointer suggests readers examine the EEF's new health and safety tool (currently free to members only), which was launched in March this year, following a pilot project, and work with the HSE and Travelers Insurance. "It is loosely based on the structure of a balanced scorecard, and helps boards to set and monitor meaningful targets, without getting into the minutiae.


Having identified the KPIs [key performance indicators], the scorecard shows how to use these to measure and monitor improvements in health and safety performance," he explains. "We believe this kind of initiative will make a real difference. It will be

freely available to all towards the end of the year."

As for specific risks worth re-examination, Pointer cites musculoskeletal injuries and other occupational diseases caused by breathing, ingesting or otherwise coming into contact with harmful substances – and hence the importance of LEV (local exhaust ventilation). Pointer gives the example of problems with metalworking fluids apparently causing asthma and alveolitis, noting that this is the subject of ongoing research at the HSE. "What we've been battling with is what controls they expect on machines, and we're near to resolving that now, with good LEV and enclosures."

Not that standards for good LEV itself should be in any doubt. IOSH (the Institution of Occupational Safety and Health) and others worked with the HSE on its guidance (HSG258), which covers everything from design and supply of LEV equipment to its installation, use and maintenance, and has been available via the HSE website for around 18 months. And there is also a leaflet for purchasers on the subject, called Clearing the Air, which provides a simple guide to buying and using LEV.

However, Richard Jones, IOSH policy and technical director, believes that the use of LEV is still misunderstood. "This is so important, particularly in plant areas," he says, commenting that LEVs' use should be subject to a hierarchy of controls. "If the process can be eliminated, that's by far the best way. Or you may want to look at substituting safer materials. But, if that isn't possible, then engineering controls are the next best step – and LEV is a crucial part of that," he explains.

Plant engineers with responsibility for health and safety should consider talking to IOSH about its training materials for getting LEV right. "HSE, working with HSL [Health and Safety Laboratory], developed training materials for their health and safety inspectors. We've adapted these to make them less focused on regulations and more on guidance for health and safety professionals," explains Jones. 

Pointers

- EU-OSHA has launched a two-year safety campaign
- Maintenance causes 20% of workplace accidents
- Robust maintenance procedures are critical
- Existing legislation holds managers individually liable
- HSE inspectors are now targeting plant maintenance
- Managers must anticipate exceptional maintenance
- Leadership from the top is key to improving statistics
- EEF is offering a health and safety scorecard tool
- Local exhaust ventilation is among primary issues

Leadership, robust procedures, training and the right tools and equipment are central to staying safe

The importance of accident investigation

RoSPA (the Royal Society for the Prevention of Accidents) is urging plant engineers and managers to improve the standard of their accident investigations. The organisation's occupational safety adviser, Roger Bibbings, suggests that the majority of accidents – even those that are notifiable – are not investigated at all.

"Even if they are, it's just superficial, without looking into the underlying causal factors and then feeding them back into health and safety management," says Bibbings.

"We produced a standard – Definition of Operational Readiness to Investigate – and have been running a campaign on this for nearly 10 years now. The problem is that, because in the post-accident situation people adopt adversarial positions, it's harder to get people to accept that there might be room for improvement. But even the good organisations are reluctant to review their readiness to mount investigation processes."