

# Penarth Management

## Healthy Workplaces Campaign 2010–2011



Our 34th year of successful consultancy

Penarth Management is registered to ISO9001:2008, ISO14001:2004 and OHSAS18001:2007

We currently assist clients with:

- ISO9001 Quality Assurance
- TickIT
- TS16949 for the automotive industry
- ISO13485 for medical devices
- ISO14001 Environmental Management
- BS8555, phased ISO14001
- BS OHSAS 18001 Occupational Health & Safety
- ISO27001 Information Security
- SIA Approved Contractor Scheme
- BS7499 Static Site Guarding
- BS5839 Fire Detection and Fire Alarm Systems
- The Chemical Industry's Responsible Care Programme
- Highways Agency Sector Schemes 4, 12A /12B , 12C, 16 and 18
- CE Marking guidance
- HACCP Food Safety
- ISO22000 Food Safety
- BRC Food Safety
- SA8000 Social Accountability
- BS25999 Business Continuity
- FSC and PEFC Chain of Custody

### Getting to Grips with Maintenance

'Maintenance' is a generic term which is used to describe a wide variety of tasks undertaken by people working in different industry sectors and in different types of working environments. Maintenance essentially falls into one of two categories:

- **Corrective (or reactive) maintenance** – when actions are taken to restore a system from a failed to a working state (e.g. carrying out a repair of a broken down machine)
- **Preventive maintenance** – when actions are carried out at planned intervals to reduce the probability of a failure (e.g. replacement of components, lubrication, cleaning or inspection)

### The Importance of Maintenance

Poor maintenance can have catastrophic consequences. There have been several high profile incidents where poor maintenance has resulted in a loss of life. Proper maintenance is essential for managing workplace hazards, yet maintenance itself is a high risk activity. Statistics show that approximately 15% of all fatal accidents at work and 20% of all accidents are connected with maintenance, even though maintenance activities only represent a small part of the work being carried out.

### Who is at Risk?

The risks of maintenance are not limited to just maintenance workers. Inadequate maintenance (caused by using the wrong parts for replacement or repair) may result in serious accidents to all workers or members of the public in or near the place of work.

### Why Carry out Maintenance?

The need for maintenance is a legal requirement. The *Management of Health and Safety at Work Regulations 1999* stipulates the requirements for Risk Assessments. The *Provision and Use of Work Equipment Regulations 1998* (PUWER) requires that work equipment be suitable, maintained and inspected and that such work should be undertaken by competent persons.

Apart from the legal requirement, employers have a moral duty to protect the health and safety of all staff and others that may be affected by their work.

### Case Study: Piper Alpha

In July 1988 images of devastation reached households around the world as newsrooms screened images of the North Sea oil rig, Piper Alpha, as a blazing inferno. To this day, this remains one of the worst incidents of its kind. A total of 167 workers were killed.

Investigations into the cause of this tragic event revealed that failings in the maintenance procedures were to blame. A condensate pump had been out for maintenance. An attempt was made to bring it back on line quickly following the failure of the in-service pump. The condensate flashed, found an ignition source and caused a disaster. The tragedy could have been avoided if the permit to work and associated isolation systems had not been breached.

From an economic point of view, getting maintenance wrong is costly as it may involve loss of income, fines, legal action, reduced business productivity and reputational damage.

Approximately 15% of all fatal accidents are connected with maintenance



HEALTHY WORKPLACES  
GOOD FOR YOU. GOOD FOR BUSINESS.  
A European campaign on Safe Maintenance





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Judi Starling



Chris Green



Harriet Hopkins

## Maintenance Related Hazards

Maintenance workers are more likely than other groups of workers to be exposed to hazards (which can be categorised as being chemical, physical, biological and psychosocial). The effects on health can be acute or chronic and can include occupational disease, serious injury or death.



Laurence Richardson



Jenny Starling

### Physical Hazards

- Slips, trips and falls
- Noise
- Vibration
- Excessive heat and cold
- Radiation
- Heavy workloads
- Strenuous movements

### Chemical Hazards

- Exposure to asbestos
- Fire
- Explosion
- Contact with hazardous substances

### Biological Hazards

- Bacteria (e.g. legionella, hepatitis A & B)
- Mould
- Fungi

### Psychosocial Hazards

- Time pressure
- Poor organisation
- Unsocial working hours
- Stress



Paul Good



Helen Hill

## Getting Maintenance Right

**Planning** – assess the risks and consult the people involved

**Make the work area safe** – prevent unauthorised access

**Use appropriate equipment**

**Work as planned** (shortcuts can lead to accidents)

**Make final checks** – to make sure that the task has been completed; that the item under maintenance is in a safe condition and that waste materials have been removed.

## Case Study: Hatfield

Four people were killed and 102 injured when a London-Leeds train de-railed at 115mph at Hatfield in October 2000. A report concluded that the incident arose when the track fractured and then shattered and that "the rail failure was due to the presence of multiple and preexisting fatigue cracks in the rail." The Health and Safety Executive concluded that the contractor responsible for carrying out works on the track had "failed to manage effectively the inspection and maintenance of the rail at the site of the accident". The inspection also criticised the track operator for failing to manage the contractor properly.



Karen McDonald



Eddy Williams



Claire Gray



Christopher Gardner

## How Penarth Can Help.....

We currently assist companies with their maintenance programmes by carrying out internal audits as part of a formal health and safety management system such as OHSAS18001 or by evaluating legal compliance. We are also now offering to create 'compliance calendars' for our clients. Using this system, we will identify all of the items that require maintenance (or other regular inspections or training). Depending on the level of service required, we can even send you monthly e-mail reminders to alert you to what needs to be carried out or we can tell you what is overdue.

Contact us via [info@penarth.co.uk](mailto:info@penarth.co.uk) or 029 2070 3328 for more details.



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