HSL: Display Screen Equipment (DSE) Risk Management – Buxton, 6 Sept 2017

Book Course

HSL is to run a 1 day course on Display Screen Equipment (DSE) Risk Management.

6 September 2017

HSL is to run a 1 day course on DSE management (including office risk assessment and risk management of mobile device).

Introduction

Display screen technology, such as computers, laptops, smartphones and tablet PCs are common in all aspects of our lives. Our exposure to these devices continues to increase, with reported levels of up to 9 hours per day spent consuming media on a display screen device. While the musculoskeletal (MSD) risks from such device are relatively low, the increased exposure does mean that the effects of preventable risks such as poor or fixed postures can accumulate and lead to problems. HSE statistics (2014/15) indicate that 44% of cases of work related illness involves MSDs, which result in 40% of working days lost. Data from the general practitioners scheme (THOR-GP) suggests that "keyboard work" are significant contributors to both lower back and upper limb disorders.

This course, delivered by experienced HSL ergonomists, will provide you with an understanding of DSE risks and approach to risk management and with the documentation to provide your employer with risk assessments. The course covers the key elements for office DSE risk assessment and management and provides the information and techniques required to enable anyone to become a DSE assessor. We also discuss risk management for less common DSE issues such as hot-desking and dual screens, and mobile technology such as tablet pcs, smartphones and laptops. Guidance on how to set up a computer workstation in the office is mirrored for home activity or when you are on the move with DSE.

The course will cover:

- Why DSE? Legal, moral, financial reasons
- How do we get injured
- What's the best posture
- Achieving good posture at the workstation
- Alternative pointing device
- Practical assessment
- Break requirements from DSE
- Mobile DSE risks and risk management

Who should attend?

The course will be most beneficial for health and safety providers, with limited knowledge / experience of DSE risk management who wish to become a DSE assessor. However, it will also be relevant to those who wish to update or consolidate their knowledge and experience as a DSE assessor.

Venue

The course will be run at the HSL laboratory in the spa town of Buxton. Buxton is in the heart of the Peak District and has good links to mainline train stations and Manchester International Airport.

Details of hotels in the Buxton area can be found at www.visitbuxton.co.uk

Cost

The cost of this course is £450 per person (includes course notes, lunch and refreshments).

Book Course

Please note the invoice option is not available within 4 weeks of the course date, or for overseas customers. If you are selecting the invoice option for payment, it will be mandatory to input a purchase order/reference number as we are unable to process booking forms without this.

For further dates and additional information email: training@hsl.gsi.gov.uk or contact the Training & Conferences Unit at HSL directly on +44 (0)1298 218806.

Back to Health & Safety Training Courses

Tata Steel UK Limited fined after uncontrolled release of toxic substances

A steel company has today been fined after the release of toxic and flammable substances from its site in Scunthorpe.

Hull Crown Court heard on 17 June 2011 a large quantity of Benzole was released at an open site glass in Tata Steel's Scunthorpe Steel Works. The release resulted in a large flammable vapour cloud that exposed five workers to the risk of serious injury of death had the cloud ignited. Two of the workers were exposed to the chemical and suffered coughing and breathing difficulties. They were sent to hospital and were discharged the next day.

An investigation by the Health and Safety Executive (HSE) found Tata Steel failed to take the appropriate safety measures to prevent the release of the toxic and flammable chemical. It was found the company failed to address the risks which had previously been identified and the incident could have been entirely avoided if the company addressed these concerns.

The site in Scunthorpe is a top tier Control of Major Accidents Hazards site due to the large amounts of highly flammable and toxic chemicals stored on the site.

Tata Steel UK Limited of Millbank, London has pleaded guilty to breaching Sections 2 (1) and 3 (1) of the Health and Safety at Work Act 1974.

The company has today been fined £930,000 and ordered to pay costs of £70,000.

Speaking after the hearing HSE inspector Stephen Hargreaves said: "It was extremely fortunate no one was seriously affected by this incident. Had the flammable vapour cloud ignited this could have resulted in multiple fatalities.

"This incident highlights the need for all duty holders to implement and address all concerns and potential risks which have been identified. Tata's failure to do so in this case put a number of workers at risk of serious harm."

Notes to Editors:

1. The Health and Safety Executive (HSE) is Britain's national regulator for workplace health and safety. It aims to reduce work-related death, injury and ill health. It does so through research, information and advice, promoting training; new or revised regulations and codes of practice, and working with local authority partners by inspection, investigation and enforcement. www.hse.gov.uk[1]

2. More about the legislation referred to in this case can be found at: www.legislation.gov.uk [2]
3. HSE news releases are available at http://press.hse.gov.uk

Journalists should approach HSE press office with any queries on regional press releases.

Company fined after scaffold collapse

A Dorset based company has been fined after a scaffold collapsed at an industrial unit in Wallisdown, Poole.

Poole Magistrates' Court heard how Swanage and Dorset Scaffolding and Roofing Limited (SDSRL) had been contracted to erect scaffolding at the industrial unit in Alder Hills Business Park, Wallisdown, Poole to provide edge protection for work to be carried out on the roof.

The scaffolding collapsed on 14 September 2015 narrowly avoiding an office worker as they exited the building but resulting in serious damage to parked cars.

An investigation by the Health and Safety Executive (HSE) found, the company failed to ensure the scaffolding provided was suitably designed and installed to prevent collapse during use. The company failed to ensure the scaffolding was suitably attached to the building to withstand foreseeable wind loads.

Swanage and Dorset Scaffolding and Roofing Limited of Romany Centre Business Park, Wareham Road, Poole pleaded guilty to breaching Regulation 19 (2) of the Construction Design and Management Regulations 2015.

The company has been fined £27,000 and ordered to pay costs of £4051

Speaking after the hearing HSE Principal Inspector Helena Tinton said: "The company failed to ensure the scaffolding was properly secured to the building to avoid it putting workers and members of the public at risk of it collapsing in high winds.

"It is very lucky nobody was injured as result of this incident. All duty holders have the responsibility to ensure all scaffolding work is properly designed and installed by competent workers."

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New Waste FAQ – When does LOLER apply to waste and recycling equipment?

There are many activities that fall outside the HSE's areas of responsibility. HSE's primary role is to protect those **at work** in waste and recycling activities and anyone who might be affected by that work e.g. members of the public. Instead, they may be covered by powers held by other national or local government bodies.

Specifically for waste management and recycling examples would include:

Collection activities

It is the Local Authority who has responsibility for waste and recycling collections in a particular area. That service may be provided directly by the local authority itself or it may have contracted out the service to a specialist contractor. In either case the first point of contact for issues relating to the collection of your waste or recyclables should be the Local Authority.

Another useful source of information on waste and recycling services can be found at the Waste Resource Action Programme (WRAP) site.

Environmental and Public Nuisance issues

Local Authorities are empowered to deal with a wide range of issues that are not the responsibility of the HSE. Usually these matters (e.g. odour, noise, vermin infestation) are dealt with by the Local Authority's Environmental Health or Services Dept or on some cases the Environment Agency (or Scottish Environmental Protection Agency in Scotland).

Planning or permitting issues

HSE is not responsible for planning permissions for the siting of or permitting of waste and recycling facilities. Those aspects are dealt with by Environment Agency (or Scottish Environmental Protection Agency in Scotland)

and the local authority in which the activity takes place.

Scrap metal dealer licences

HSE is not responsible for determining the suitability of applicants and issuing of scrap metal dealer licences. Local authorities have sole responsibility.

The Waste Industry Safety and Health (WISH) forum is a multi-party forum made up of organisations broadly representing the waste and recycling industry. WISH members include representatives from HSE, main trade associations, professional associations, trade unions, recycling organisations and national and local government bodies involved in waste management and recycling. Its purpose is to provide information, identify solutions and stimulate action across the industry to ensure the health, safety and well-being of those working in the industry and those affected by its activities.

In January 2009, the WISH forum launched its Charter and strategic objectives to improve performance in the industry over a four-year period (January 2009 to December 2013). The strategy has five key objectives:

- reducing accident numbers by 10% year on year over five years;
- reduction in the number of working days lost due to accident and ill health;
- promotion of effective health and safety management;
- improved safety culture and attitudes in the workforce; and
- increase in the levels of competence.

Further information on WISH, it's members and the work it is currently undertaking can be found on the Waste Industry Safety and Health page.

Health hazards

The guide health hazards in the waste and recycling industry is associated with four main routes:

- **skin contact**, especially through cuts and abrasions or through contact with the eye's mucus membrane;
- **injection** through sharps injuries;
- **ingestion** through hand to mouth contact (commonly experienced when eating, drinking or smoking); and
- **inhalation** through the lungs.

Additional information on the source of the hazards, the risks they pose and reasonably practicable control measures that can be used to prevent or control exposure can be found on the occupational health page.

HSE is not the Enforcing Authority for issues relating to odours and complaints should be referred to the appropriate Local Authority, Environmental Health Department or Environment Agency (or Scottish

Environmental protection Agency (SEPA) in Scotland).

Composted material may have a distinctive smell, depending on the feedstock, for example if it contains a large proportion of pine branches there will be the characteristic resin smell. The volatile chemicals responsible for smells are gases, which are smaller in size and lighter than particles of dust and bio aerosols (mould spores and bacterial cells in the air) behave like small particles of dust. Consequently, gases can travel further in the air than the heavier particles, which drop from the air under gravity. Some odorous gases can be smelled at extremely low concentration. Sometimes, if composting activities are poorly managed, the compost becomes ‘anaerobic’ (oxygen starved) which causes the bacteria in the compost to create different chemicals with unpleasant smells. In many cases, this can be avoided: if it occurs you should complain to the compost site or bring it to the attention of the local authority.

Bioaerosols, including those from compost, are like any other small dust particles in the air. They can move and be carried along in air currents before falling to the ground under gravity. If the wind direction and strength is known, it is possible to predict in what direction and how far a bioaerosol will travel away from the source of its release. As it is carried by air currents from that source, it will be dispersed and therefore diluted in concentration as it mixes with the surrounding air. Local conditions will affect this; for example, the warmth from a compost pile will make the bioaerosol rise higher in the air, and nearby buildings, trees, fences etc will also push the air current higher into the air, causing more mixing with the surrounding air and dilution of the bioaerosol.

Most published studies on compost bioaerosol exposure and health have focused on the exposure of workers on sites handling the material, because their exposure will be greatest. Some studies have looked at the effect of composting activities on surrounding bioaerosol concentrations. A limited number of studies have looked at the health of nearby residents. While it is recognised from these studies that under certain conditions composting activities nearby may raise bioaerosol concentrations above background levels, these concentrations are much lower than would occur on a composting site near to compost material being handled. There is no reported evidence of significant increase in ill health in residents near composting sites in these situations. The lungs of a healthy person are capable of being exposed to relatively large concentrations of micro-organisms without ill effect.

For more information on composting and recycling biodegradable waste can be found at:

Research

Background

Parts of the waste management and recycling industry have problems dealing with unwanted or unidentifiable (‘orphaned’) compressed gas cylinders that turn up in the waste stream. In addition, other cylinders such as fire

extinguishers can contain small internal CO2 cylinders under high pressure.

Discarded cylinders which still contain containing compressed gases, (or which are apparently empty but in fact still contain some residual content) commonly appear in the waste stream, especially at civic amenity sites and metal recyclers.

Collection

The quantities of compressed gas cylinders on a civic amenity sites or metal recycling site should be kept as low as is reasonably practicable within the limits of the safe storage facilities that have been provided, and they should be collected on a regular basis (see below for details on collection). It may take quite some time for smaller civic amenity sites and metals recyclers to accumulate sufficient cylinders to require a collection.

The Liquefied Petroleum Gas Association (LPGA) comprises all the major manufacturers and fillers of LPG in the UK, and sets standards for the industry. Currently, the LPGA coordinates a LPG cylinder retrieval scheme and arrangements are in place for the major national companies

Processing

Particular problems can arise when cylinders that are concealed within other metal waste is processed at metal recycling sites. Rupture of the cylinders within the fragmentisers or shredders can cause explosions. Sites should have suitable systems in place to remove, so far as reasonably practicable, all cylinders from the waste stream prior to reduce the potential of such incidents.

Further information can be found at:

Transport related lifting operations can cause serious personal injury or death. Whilst it is not comprehensive, the advice covers transport-related lifting operations involving the use of:

- Hoists fitted to refuse collection vehicles
- Lifting equipment fitted to skip loaders
- Lifting equipment on Hookloader and Skid steer loader vehicles
- Material handlers (e.g. 360o excavators fitted with grabs, forks or magnets)
- Skips and other containers

The training requirements for drivers of plant eg shovel loaders, excavators, fork lift trucks (FLTs), telehandlers etc. in a waste and recycling setting will be no different to other industry sectors (e.g. general manufacturing, construction and agriculture). Driver competence is judged on the basis of experience, recognised training (formal training – either deliver in-house or externally) and testing of knowledge and ability.

No-one should be allowed to drive (operate) a vehicle unless their employer

has authorised them to do so in writing. The employer should not authorise a driver unless the driver has received adequate training and the employer is satisfied that the driver is competent to operate the shovel loader.

Certificates of training from recognised training schemes help demonstrate competence. But employers are perfectly entitled to devise and operate their own in-house training schemes – this is especially the case with some larger companies.

While employers may operate their own in-house training schemes, they should have similar content to the more formal training courses that are available. Furthermore, they may find it useful to have the courses delivered by an Accredited Training Provider.

Further information on plant operator training and general training requirements can be found on the Waste and Recycling Training page.

'Offensive/hygiene' waste is produced by healthcare (medical care) practices or healthcare workers in the community and as well as that produced by domestic households from personal use. These wastes can be found in the municipal waste and recycling streams and they have the potential to cause ill health to workers handling them. Typical effects can be:

- skin/eye infections (eg conjunctivitis);
- gastroenteritis (symptoms include stomach cramps, diarrhoea and vomiting).

Offensive/hygiene wastes can include:

- human and animal waste (faeces), incontinence pads, catheter and stoma bags, nappies, sanitary waste, nasal secretions, sputum, condoms, urine, vomit and soiled human bedding from a noninfectious source;
- medical/veterinary items of disposable equipment such as gowns, plaster casts etc;
- plasters (minor first aid or self care) generated by personal use;
- animal hygiene wastes (animal bedding, dog faeces etc); and
- waste from non healthcare activities, for example wastes from body piercing or application of tattoos.

Offensive/hygiene waste should only be processed by licensed facilities capable of safe handling and disposal.

Other 'clinical' waste as defined under environmental legislation as 'hazardous healthcare wastes that is hazardous from its infectious nature or its medicinal or chemical properties' should be handled, transported, treated and disposed of as set out in guidance from the Environment Agency website and the Department of Health.

The selection and provision of hygiene facilities on collection vehicles should be risk based.

Employers are required to carry out a suitable and sufficient assessment of risk from exposure to hazardous substances (Regulation 6, Control of Substances Hazardous to Health (COSHH) 2002). Factors to be considered include:

- the nature and type of materials being collected
- the potential level (low/medium/high) and frequency of contamination
- levels of containment (eg bags, wheelie bins, boxes)
- routes of exposure
- the location of collection activities (eg rural v urban)

Where it is not reasonably practicable to prevent exposure appropriate protection measures should be selected using the following hierarchy of control (Regulations 7(3) to 7(6), COSHH 2002).

- Adequate washing facilities i.e. wash basins with soap, warm/cold water provision and towels
- Hand wipes
- Hand gels

These control measures can be provided separately or in combination (and in conjunction with other measures, eg. provision of personal protective equipment).

Alternative control measures can be employed if it can be demonstrated they are the most effective and reliable control options.

Control of exposure will only be considered adequate if employers can demonstrate they have applied the principles of good practice (Regulation 7(7)(a) and Schedule 2A, COSHH 2002). For example:

- all relevant routes of exposure are considered
- measures are proportionate to the health risks
- most effective and reliable control options are chosen

The key is to develop a set of control measures that are effective, reliable, practicable and workable to control exposure adequately.

Employers should consider the efficacy, as well as pros and cons associated with use, of the measures selected to determine if exposure is adequately controlled.

Employers should be able to demonstrate the basis upon which they have selected the control options including appropriate hygiene measures.

Where fitted, hand wash basins should be maintained in good working condition.

Where provided, employers should ensure sufficient stocks of hand wipes and hand gels are available.

Emergency decontamination procedures and arrangements should be provided. For example, during collection activities if gross contamination occurs (eg from

split bags, contact with animal and human waste, acids, alkalis etc) the provision of hand wipes and/or gels alone is unlikely to be sufficient. Where such circumstances are foreseeable, emergency arrangements should be provided, including for example, additional measures that will assist with cleaning (such as a readily available bulk supply of clean water; identification of locally available welfare facilities etc.).

Adequate information, instruction and training will need to be provided to employees. This will include information on how to use the controls provided, maintain good personal hygiene and deal with incidents of gross contamination.

Supervision and monitoring will be needed to ensure that the measures provided are properly used.

The provision of appropriate hygiene measures does not affect the need to provide other control measures, such as suitable personal protective equipment (PPE), including appropriate gloves etc.

Additional information

Simple measures can help those who manage storage bin areas and collect bins, to reduce the risks of people being able to get into large commercial and communal domestic bins and being killed or injured.

What precautions you need depends on how foreseeable it is that people can gain access and get into the bins and how likely they are to be found if they have got in.

Factors increasing foreseeability include:

- the bin storage area:
    - being isolated and quiet
    - being dark and unlit, especially at collection times
    - being open and unsecured permitting easy access to the bins
    - making bin lids easy to reach by their position and/or leaving items to climb on
- the bins:
    - having lids that are not secured and easy to open
    - having large openings that are easy to get through
    - being stored for long periods un-emptied and un-disturbed
    - containing dry and comfortable type waste (paper, card, textile and other similar dry wastes are more likely to attract those seeking shelter)
- the environment:
    - rough sleepers, drug abusers, alcoholics and vagrants known to be in the area
    - known instances or people being found in the bins or in the storage area
    - periods of wet or cold weather (people are more likely to seek shelter, and for longer in these conditions)

Key issues to address are:

- reducing the likelihood of people getting into bins;
- checking there is nobody inside before emptying;
- stopping the compactor quickly as soon as employees realise someone has been tipped into the collection vehicle.

The types of bins involved are normally larger ones (typically 660 litres capacity and above with four wheels) used for commercial and communal domestic collections, euro carts, front-end loader containers, paladins and skips. Cases involving smaller wheelie bins (typically 120 litres with two wheels) are rare.

Waste bins sometimes have **warning signs** attached to them about the dangers of sheltering inside and/or reminders to check before emptying. These are useful (more so if pictures are used to overcome literacy and language difficulties), but are not required to achieve compliance with the law.

As a waste producers and/or businesses managing bin storage areas what do I need to do?

- where practicable, locate bins in a secure area;
- where there have been signs of people getting or trying to get into bins and it is reasonably foreseeable use bins most suitable to minimise risks, (eg with lid locks, lid-opening restrictors, fixed or lockable grilles or other access-restrictors);
- follow the supplier’s instructions for bin security devices and ensure they used and properly maintained;
- inform relevant employees about people getting into bins and the action required to prevent/minimise this;
- ensure employees watch out for and report any signs of people getting, or trying to get, into storage areas and especially into bins;
- ensure employees check bins regularly (see below), especially before a collection is due

As a waste collector what do I need to do?

- ensure collection drivers and loaders are fully aware of the potential for people to be in bins
- inform drivers and loaders about checking the bins before emptying them, including what to do if a person is found (see below);
- ensure compactor stop switches are readily accessible, clearly marked and employees know where they are and how to use them;
- supervise employees to ensure the necessary actions are taken.

How should bins be checked for people inside?

- a quick visual check of the bin contents is enough. This can simply mean being aware of what waste should be there, looking for obvious signs of disturbance and checking for unexpected items, such as bags, blankets etc
- physically disturbing and rummaging around in the contents is not

necessary and should be avoided.
- where bins are being emptied by front-end loaders, tapping/banging the bin on the floor using the lift mechanism is also recommended before emptying.

What should waste producers and other waste businesses concerned do if people are found in bins?

- give their relevant employees clear information and instructions on the risks and what to do if a person is discovered inside a bin (or collection vehicle). This should include:
  - how people are likely to behave, especially the potential for becoming aggressive and possibly violent (see advice in the Violence pages and in HSE's leaflet *'Violence at work: A guide for employers'*).
  - ***not*** to try restraining the person, especially if they attempt to escape;
  - how to help people get out of the bins or the vehicle;
  - how to report any incidents where people have been found in bins
- report any fatalities or serious injuries to people needing treatment in hospital in accordance with the Reporting of Injuries, Diseases and Dangerous Occurrences Regulations (RIDDOR) 2013.

Other good practice measures that could be considered and taken, but are not necessary to achieve compliance with legal requirements, include:

- record brief details of all incidents involving people found getting into storage areas and/or bins (even if non-reportable under RIDDOR 2013);
- share this information with other relevant parties (eg between those producing and collecting the waste);

take the information into account when deciding whether the existing control measures are adequate and whether any improvements are needed.

Worker suffers flash burns

A manufacturing firm has been sentenced for safety breaches after a worker suffered flash burns to her face, neck, chest and both arms.

Pyronix Limited manufactures intruder alarm equipment. Part of the manufacturing process involves dipping Printed Circuit Boards (PCBs) in Fluorocoat Thin Film Coating, which is a highly flammable substance, to provide humidity protection.

Sheffield Magistrates' Court heard that in April 2015 the injured worker was

dipping baskets containing a variety of the PCBs which had batteries pre-installed prior to dipping. As the worker removed a basket out of the tank, she saw a “burning cloud” go through the tank and was unable to avoid being burnt after the Fluorocoat had been ignited.

An investigation by the Health and Safety Executive (HSE) found that changes needed to be made in the planning of this activity. A number of modifications were made to the tank and process. This included not installing the battery into the PCB until after dipping, adding local exhaust ventilation to the tank and additional measures to control static. Employees also received additional training.

Pyronix Limited of Hellaby Rotherham pleaded guilty to breaching Section 2 (1) of the Health and Safety at Work Act 1974 and was fined £140,000 with £3133.25 costs

After the hearing, HSE inspector Laura Hunter commented: “This incident could so easily have been avoided by simply carrying out correct control measures and safe working practices.

“Companies should be aware that HSE will not hesitate to take appropriate enforcement action against those that fall below the required standards.”

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