

<i>Incident</i>	<i>Type</i>	<i>Date</i>
Fall from platform	Fatality	1997
Gas exposure	Hospitalisation	1998
Fall through fragile roof	Near miss Hospital treatment	2000
Scaffold collapse	Near miss Equipment damaged	2000
CO exposure at steel works	Near miss	2000
Steam release by sampling platform	Near miss	2000
Fall from ladder	Hospitalisation	2000
Fall through platform	Fatality	2000
CO exposure	Near miss	2001
Handrail collapse	Near miss	2001
Lightning strike	Near miss	2003
Glassware dropped from platform	Near miss	2003
Scaffold ladder breakage	Near miss	2004
Gas cylinder fall from van	Slight injury	2004
Fall from Cherry Picker in Italy	Fatality	2008
Pump box fall from winch	Near miss	2008



<b>Scafftag Categories</b>	
Very light duty	to 0.75 kN/m <sup>2</sup> (75kg/m <sup>2</sup> )
General purpose	to 2.0 kN/m <sup>2</sup> (202kg/m <sup>2</sup> )
<b>Heavy duty</b>	<b>to 2.5 kN/m<sup>2</sup> (252kg/m<sup>2</sup>)</b>
Special purposes	must state safe kN/m <sup>2</sup>

## HEALTH & SAFETY *BULLETIN*

### Source Testing Association

The Health & Safety Bulletin is a means of disseminating important issues relating health and safety of professionals involved in air emission monitoring and allied fields.

To contribute to this publication please e-mail H&S@s-t-a.org with your suggestions or article

#### Source Testing Association

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**STA Guidance Notes are available on the web site.**

**Visit [WWW.S-T-A.org](http://WWW.S-T-A.org)**



## Croner Health and Safety Briefing Newsletters

The STA is subscribing to this fortnightly newsletter produced by Croner CCH Group Ltd. Members can request a copy, a full list is available in the members area of the web site on the Health & Safety page. If you would like copy of any particular issue please contact Samantha, or email [health-safety@s-t-a.org](mailto:health-safety@s-t-a.org).



### WHY oh WHY do you still do it!!!!!!

#### What price is put on safety?

Reports still come in to the STA offices of members and non-members using Cherry Pickers and light duty mobile platforms for carrying out stack emission monitoring.

What will it take before we stop using these dangerous practices, we have already reported on the **death of a stack tester in Italy** using a cherry picker. The STA guidance from when we started is not to use them.

All the guidance and including MCERTS performance standard outlaws the use of these devices. If a client ask you to work from one of these devices ask him if he would like to work up there with all the equipment you are taking. Do they realise the health and safety implication on them when something goes wrong?

If you have personnel certification to MCERTS you have signed up to improving Safety and quality throughout the industry, going up one of these platforms could jeopardise your certification.

Refer to STA guidance note **HSGN019** for detailed information of why mobile elevating platforms are unsuitable for emission monitoring available from [www.s-t-a.org/safety](http://www.s-t-a.org/safety)



Health & Safety Executive  
Reducing risks,  
protecting people

#### New HSE Strategy

Changes within UK business, has prompted the Health and Safety Executive to launch a new strategy to help reduce accidents in the workplace. In particular the following factors have encouraged the HSE to develop the new strategy:

- ◆ the recent slowing of improvements in the UK's Health and Safety performance,
- ◆ an increase in small businesses and the self-employed,
- ◆ different risks posed by new business sectors and
- ◆ the need to regain health and safety from those who wish to proliferate bureaucracy and use it to further their own agendas.

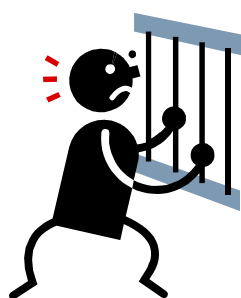
This can only be welcomed by those in the stack testing industry where all of the above are very relevant.

The strategy entitled The Health and Safety System of Great Britain: Be Part of the Solution is expected to focus on:

- ◆ Encouraging strong leadership in health and safety
- ◆ Developing the skills of those delivering health and safety in the workplace
- ◆ Helping small business comply with health and safety legislation
- ◆ Avoiding catastrophes in Britain industries

The Strategy has been out to consultation till 2<sup>nd</sup> March 2009 and the finalised strategy is due out soon. Keep an eye on the HSE website for details. [www.hse.gov.uk](http://www.hse.gov.uk)

#### Tougher Penalties for Health and Safety Offences



On the 16<sup>th</sup> January 2009 the Health and Safety Offences Act 2008 came into force. This increases the penalties courts can impose on those who are found guilty of breaching existing health and safety legislation. The maximum fine in a Magistrate's court has risen from £5000 to £20000. The range of health and safety offences that can result in imprisonment has been increased. This new act strengthens the penalties for specific offences under for instance the Work at Height Regulations and the Manual Handling Regulations. :

Although there are many new pieces

of health and safety legislation a company director was jailed in January this year for manslaughter and offences under the Health and Safety at Work Act 1974. The 1974 act is still fundamental to workplace safety and requires that:

**every employer ensures, as far as reasonably practicable, the health, safety and welfare of all the employees.**

In an accident an employee of the company fell through a skylight when working on a roof, and he died from his injuries. Company directors serious about health and safety should be aware of such well published cases.

The Corporate Manslaughter and Homicide Act 2007, which has been with us for over a year now, considers gross failures of health and safety management within companies, where there is a disregard of health and safety, particularly at the director level. How many directors have health and safety training? The emphasis is on driving health and safety from the top to create a good health and safety culture within the companies. Procedures maybe in place but if directors are not ensuring these are followed then they may fall foul of the Corporate Manslaughter Act. The penalties are corporate and financial rather than individual and custodial but the fines are unlimited. A first offence would carry a minimum fine of 5% of turnover. So if your business turnover is £5 million your minimum fine would be £250000. It is probable that to support the prosecution under the Corporate Manslaughter Act and to show a management failure, a parallel prosecution of a manager, director, secretary or other similar officer under section 37 of the Health and Safety at Work Act would be undertaken.

#### Manual Handling of Gas Cylinders

One third of all workplace accidents are caused by manual handling accidents and stack testing has more than its fair share of manual handling.



For instance, are you taking gas cylinders onto the elevated platforms? If so how does your risk assessment realistically consider all the risks associated

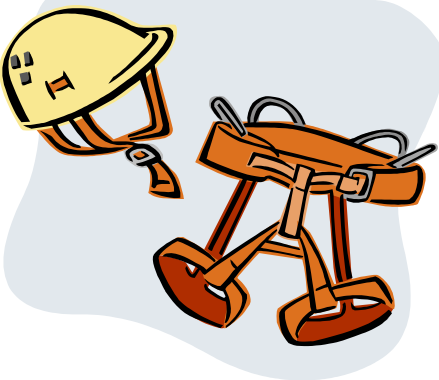
with this?

The Manual Handling Regulations 1992 (Amended 1998) require the assessment of the hazards of manual handling operations.

In a recent case, Lincat Ltd, a professional oven manufacturer, was prosecuted for offences under the Manual Handling Regulations and the Health and Safety at Work Act. The company found guilty and fined £19,400. In this case a worker was helping to lift an oven from a bench to the ground when he suffered a groin injury and was off work for 46 days. The company was found guilty of not correctly assessing the risks and this was considered to be a symptom of poor health and safety management by the company.

Could you say that the risk assessment you carry out for the movement of gas cylinders adequately considers all the risks involved? Is there a safer way of working? Is there an adequate procedure for handling the gas cylinders? Is the correct equipment available and is it suitable for the task?

### **Have you been trained on using a harness?????????**



An employee was wearing his safety harness too loose. At the time of the fall, it took some time to rescue him from his fallen position. Due to the fact his harness was not tight fitted to the body, he was hanging in his leg supports which was squeezing his scrotum resulting his testicles were pushed out. It took 4 hour surgery to close the wound. Less visible on the pictures, if you want to see the full article with the pictures please contact [andy@s-t-a.org](mailto:andy@s-t-a.org), are two (on both sides) of the scrotum horizontal lacerations of the straps. Unknown at this point in time is whether the damage was irreversible, but you can imagine the pain he was going thru while hanging in his "too loose" fitting harness.

*The lesson to be learnt is to always make sure you are trained in the correct use of harnesses.*

### **Is this Safe?**

Do you see anything wrong with the monitoring location in the photograph?



During the previous two years, two MCERTS accredited contractors had been to this location and conducted monitoring for hydrogen fluoride.

- ◆ **Would you monitor here?**
- ◆ **If so, could you do so safely?**
- ◆ **Can you spot the issues?**

Scaffolding has been provided for access to one of the access ports. The other access port is very close to the CEM extraction point, which is not ideal. However, the stack ends at handrail height, which makes it virtually impossible to avoid being exposed to the stack gases while on the platform.

One monitoring contractor noted the hazard and recorded that the risk would be controlled by undertaking monitoring when the wind was in the correct direction! !!!!!

The other monitoring contractor proposed the use of breathing apparatus (BA). The STA does not endorse this approach. In such situations, the risk of personal injury outweighs the environmental benefit that may be gained from carrying out the monitoring. The STA Industrial risk assessment guide (the Yellow book) states that "BA may be appropriate as an escape precaution, but as with all PPE, personnel must be trained in its use".

Whether monitoring HF or any other emission, it is not safe to work in a location where exposure to stack gases cannot be avoided.

Ask yourself whether you would walk away from this monitoring point on safety grounds? Would you have noted that the short distance between the monitoring location and stack exit

would render the monitoring meaningless.

It is also worth noting that several of the vertical access ladders did not have chains or gates at the tops preventing those working on platforms from falling.

Unfortunately, this example is not an isolated case, so stack emission monitoring personnel need to be ever vigilant.

Please note MCERTS Level 2s, who do not follow the health and safety requirements in the STA's "Yellow book" may lose their MCERTS certification. Remember that safety should always be your highest priority.

The Environment Agency and the STA will support monitoring personnel, who are put in an unsafe situation. If you have any concerns about a site, please contact the Environment Agency Regulatory Officer responsible for the site, or the relevant Regional Monitoring Specialist.

Alternatively, you can contact Rupert Standing, [rupert.standing@environment-agency.gov.uk](mailto:rupert.standing@environment-agency.gov.uk) or Andy Curtis, [andy@S-T-A.org](mailto:andy@S-T-A.org)

## **Seven Steps to Safer Stack Work**

**ADVICE LINE Tel +44 (0) 1462 457535**

**Before you start work, ask yourself.....**

- 1. Has the permanent platform had the relevant inspections, refer STA guidance WAH001.**
- 2. Is any temporary platform SCAF-TAGGED and secured to an appropriate permanent structure?**
- 3. Do you have all information you need to work safely, e.g. flue-gas composition, etc?**
- 4. Have you completed your risk assessment?**
- 5. Are necessary control measures in place to reduce the risk?**
- 6. Do you have with you PPE, first-aid box and eyewash?**
- 7. Do the relevant site staff know where you are working?**

**Email [Health.Safety@S-T-A.org](mailto:Health.Safety@S-T-A.org)**



## Company Medicals

In an attempt to review and summarise the issues related to the inclusion of the 'ensuring they meet the physical fitness' clause in the CEN/TS 15675 standard the following information has been collected on current legislation and existing medical with industry.

The use of occupational medicals is reasonably widespread within industry and is supported by current Health and Safety legislation.

The key principle of the Health and Safety at Work Act 1974 states that:

"It shall be the duty of every employer to ensure, so far as is reasonably practicable, the health, safety and welfare at work of all his employees."

If an employee collapses on a platform due to an existing medical condition, would the employer be liable for not assessing the workers fitness for the job?

Would the employer be liable under the 1974 HSW Act as they have not ensured the health safety and welfare of his employees?

The draft standard DD CEN/TS 15675:2007 states that:

*"Emission measurements at stationary sources is complex and requires the ability to work under difficult operating conditions. Staff should be assessed to ensure they meet the physical fitness requirements to operate under difficult conditions. "*

It cannot be argued that the work is not difficult, complex and physically demanding. It certainly is even for the youngest and healthiest of employees. Should the employer assess their employees fitness to do the work? If an employer sends an employee, who has for instance a high risk of a heart attack, up a 300' stack carrying a method 5 box

would he have contravened the HSWA 1974?

Is he ensuring as far as reasonably possible the health of his employee?

The Management of Health and Safety at Work Regulations 1999 states that risk assessment must be undertaken as follows:

*(1) Every employer shall make a suitable and sufficient assessment of -*

*(a) the risks to the health and safety of his employees to which they are exposed whilst they are at work; and*

*(b) the risks to the health and safety of persons not in his employment arising out of or in connection with the conduct by him of his undertaking,*

It goes on to state that:

### Health surveillance

*Every employer shall ensure that his employees are provided with such health surveillance as is appropriate having regard to the risks to their health and safety which are identified by the assessment*

There is a difference between health surveillance and health monitoring and this is described in the document published in 2008 by the Constructing Better Health organisation entitled 'Occupational Health Standards for the UK Construction Industry'. Health surveillance is used to identify specific risks and health monitoring is a general review of health.

A further piece of relevant legislation is the 2005 Work at Height Regulations which requires that;

*" every employer shall take suitable and sufficient actions to prevent, so far as practicable any person falling a distance liable to cause personal injury".*

Again taking 'suitable and sufficient actions' could be considered to be assessing the physical ability of an employer to climb a 300' chimney.

Medicals and health monitoring is widespread within various industries.

Many staff with the stack testing industry already have medicals and /or health monitoring either due to company policies, insurance reasons or for general health surveillance purposes.

Insurance policies will generally have a due diligence clause stating that :

*The insured must take reasonable steps to prevent accident or injury*

The particular health problems that could potentially be associated with monitoring of stack emissions include:

- ◆ Low Back Pain
- ◆ Occupational Asthma
- ◆ Reduced lung function
- ◆ Hearing problems
- ◆ Dermatitis
- ◆ Heart problems

A current health campaign entitled 'Know Your Numbers' encourages people to know their basic health figures. These are:


- ◆ Blood Pressure
- ◆ Blood Cholesterol
- ◆ Blood Glucose
- ◆ Body Mass Index

From these figures a % risk of a having a heart attack in the next 10 years can be derived.

This type of assessment can be carried out within 20 minutes in the work place at very little cost.

More formal medicals such HGV medicals start at around £50 including VAT and CAA medicals for pilots start at around £80 including VAT.

**Risk Assessment Booklet VERSION 10**  
**THE INDUSTRY STANDARD**



The little **YELLOW** book in its expanded form is to become the industry standard and referred to in the new EA guidance documents. The booklet is available free to all. *Have you got your copy yet?*

Do you give them out to **YOUR** clients?

**THE BOOKS ARE FREE**

Contact Samantha for copies, there is no limit to the amount we can send out.

**HAVE YOU BEEN ON THE RISK ASSESSMENT COURSE ?**

If not contact Samantha telephone 01462 457535 for the next available dates,  
See web site details [www.s-t-a.org/training](http://www.s-t-a.org/training)

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