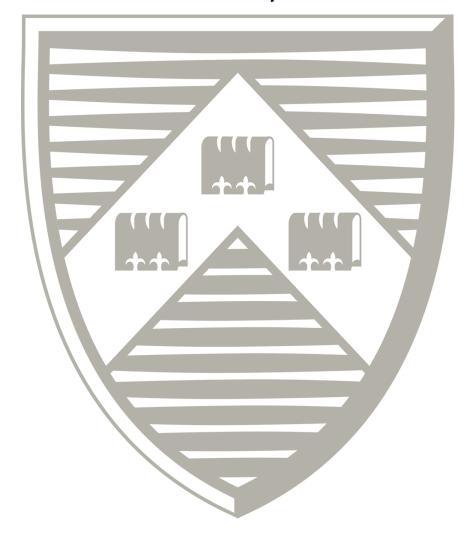


### **Health and Safety Services**



# UNIVERSITY POLICY AND MANAGEMENT PROCEDURE

## **Health and Safety Signs**

Statement

This University Policy and Management Procedure was approved and authorised by the Health,

Safety and Welfare Committee on 21 June 2010 on behalf of the University of York Council and

forms part of the Health and Safety Policy of the University of York.

This document is a Management Procedure for good health and safety management practice.

This Management Procedure provides Deans of Faculty, Heads of Departments, Heads of College

and all managers, staff and students with the necessary information to incorporate healthy and

safe practices and relevant procedures into their activities. Divergence from this Management

Procedure may result in Deans of Faculty, Heads of Departments, Heads of College and the

University of York being exposed to possible legal proceedings.

The use of this Management Procedure and the incorporation of its requirements into working

practices and activities will ensure that the University of York and its community achieves

compliance with its legal duties with regard to health and safety.

The most recent version of this Management Procedure is available at

http://www.york.ac.uk/admin/hsas.

Date of Review
Date of Last Review
Date of Next Review

February 2019 By June 2016 By June 2018

Director of Health and Safety Services The Director of Health, Safety and Security

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#### **UNIVERSITY POLICY**

#### 1. INTRODUCTION

The University of York (University) recognises its management responsibilities for the risks and hazards associated with work. The University will ensure that appropriate safety signs at work are standardised throughout the University.

The Health and Safety (Safety Signs and Signals) Regulations 1996 (the Safety Signs Regulations) implement European Council Directive 92/58/EEC on minimum requirements for the provision of safety signs at work. The Directive standardised safety signs throughout Europe so that wherever a particular safety sign is seen it provides the same message.

The University will provide specific safety signs whenever there is a risk that has not been avoided or controlled by other means, for example by engineering controls and Safe Systems of Work (SSoW). Where a safety sign would not help to reduce that risk, or where the risk is not significant, no safety signs will be provided.

The University will, where necessary, use and maintain road traffic signs within workplaces to regulate road traffic. Safety signs will be maintained where provided and unfamiliar safety signs will be explained using simple English text.

This University Policy and Management Procedure has been developed taking into consideration relevant information and guidance from the following publications:

- The Universities and College Employers Association (UCEA) University Health and Safety Management, Code of Best Practice.
- The Quality Assurance Agency (QAA) for Higher Education Code of Practice for the assurance of academic quality and standards in higher education.

This Management Procedure provides instruction and practical procedures on how safety signs can be used safely and provides best practice for University staff and others to discharge their responsibilities and duties in accordance with the law.

This Management Procedure excludes safety signs and labels used in connection with the supply and use of Hazardous Substances at the University. Up to date guidance and information with respect to the use of Hazardous Substances is available via the Health and Safety Services (HSS) website below:

#### http://www.york.ac.uk/admin/hsas/

## 1.1 <u>United Nations Globally Harmonised System of Classification and Labelling of Chemicals</u> (UN GHS)

Within the Europe Union (EU), Member States of the European Commission have prepared a Regulation which will implement the UN GHS criteria in all EU Member States.

The UN GHS aims to ensure that information on the hazardous properties of chemicals is available throughout the world in order to enhance the protection of human health and the environment during the handling, transport and use of chemicals.

CHIP refers to the Chemicals (Hazard Information and Packaging for Supply) Regulations **2009.** These regulations are also known as CHIP 4.

CHIP is the law that applies to suppliers of dangerous chemicals. Its purpose is to protect people and the environment from the effects of those chemicals by requiring suppliers to provide information about the dangers and to package them safely. CHIP requires the supplier of a dangerous chemical to:

- Identify the hazards (dangers) of the chemical. This is known as 'classification'.
- Give information about the hazards to their customers. Suppliers usually provide this information on the package itself (e.g. a label); and
- Package the chemical safely.

The CHIP regulations will gradually be replaced by the European Regulation on Classification, Labelling and Packaging of Substances and Mixtures - known as the CLP Regulation.

An example of current signage changes is below.

The UN GHS will be adopted by 01 June 2015.

#### 2. APPLICATION OF THIS MANAGEMENT PROCEDURE

This University Policy and Management Procedure provides a framework for the University to ensure that appropriate safety signs are displayed in compliance with legal obligations and relevant Codes of Practice.

Compliance with this Management Procedure is mandatory.

#### 3. DEFINITIONS

There are four basic colours used to identify safety signs:

RED is used in prohibition signs to signify dangerous behaviour, and to identify and locate

stop, shutdown, emergency cut out devices and Fire Fighting Equipment (FFE).

#### **Prohibition Signs**

Are round with a white background and red border and diagonal cross bar (the red must take up at least 35% of the sign area). Pictograms must be black and placed centrally on the background without obliterating the cross bar. The sign means that something must not be done.



#### **Fire Safety Signs**

Are square or rectangle with a white pictogram on a red background (the red to take up at least 50% of the sign area). These signs identify and show the location of Fire Fighting Equipment (FFE).



YELLOW is used in warning signs to indicate possible danger.

#### **Warning Signs**

Are triangular with a yellow background (the yellow to take up at least 50% of the sign area) and a black border. The pictogram, placed centrally, must be black. This sign warns of a particular hazard or danger.



**BLUE** is used in mandatory signs to signify the specific behaviour or action that is required to be taken.

#### **Mandatory Signs**

Are round with a blue background (the blue to take up at least 50% of the sign area) and white pictogram. These signs state what specific behaviour or action is expected, or what

protective equipment must be worn.



 GREEN is used to show the direction of emergency escape routes and exits, and the location and identification of First Aid facilities. It can also be used to indicate a return to normal, for example a non dangerous state or safe condition.

#### **Emergency Escape or First Aid (Safe Condition) Signs**

Are square or rectangle with a white pictogram on a green background (the green to take up at least 50% of the sign area). These signs indicate safe conditions such as First Aid facilities or emergency routes.



#### **ARRANGEMENTS**

#### 4. RISK ASSESSMENT

In determining where to use safety signs, the University will take into account the results of the risk assessment made under the **Management of Health and Safety at Work Regulations 1999** (the Management Regulations) and other relevant University Policy and Management Procedures.

This assessment deals with hazard identification, the risks associated with those hazards, and the control measures to be taken. When the control measures identified in the assessment have been taken there may be a 'residual' risk such that employees, students and others will need to be warned, and informed of any further measures necessary. Safety signs are needed if they will help to reduce this residual risk. If the risk is not significant then no safety signs will be provided.

#### 5. USE OF HEALTH AND SAFETY SIGNS

If the hearing or sight of any employee is impaired for any reason, for example, by wearing Personal Protective Equipment (PPE); additional measures may need to be taken to ensure that employees can see or hear the warning sign or signal, for example by increasing the brilliance or volume.

In some cases more than one type of safety sign may be necessary for example an illuminated warning sign indicating a specific risk combined with an acoustic alarm meaning 'general danger'

to alert people, or hand signals combined with verbal instructions.

All safety signs need to be properly maintained so that they are capable of performing the function for which they are intended. This can range from the routine cleaning of signboards to regular checks of illuminated signs and acoustic signals to see that they work properly.

A guaranteed supply of power or back-up in the event of failure may be necessary for safety signs and signals which require some form of power to enable them to operate (unless the hazard is itself eliminated by the power failure).

Consideration should be given to avoiding too many signboards in close proximity. Signboards are only effective if they can be seen and understood. If too many signs (including information signs) are placed together there is a danger of confusion or important information being overlooked.

If circumstances change, making a particular signboard unnecessary (if the hazard no longer exists), it is important to ensure its removal so that misleading information is not displayed.

#### 5.1 Containers and Pipes

Containers, tanks and vessels used in the workplace to contain dangerous substances, and the visible pipes in the workplace containing or transporting dangerous substances, will in general need to have signs or labels fixed to them unless the risk is adequately controlled or is not significant. There are, however, a number of exceptions:

- It may not be necessary to affix signs to pipes where the pipe is short and connected to a container which is clearly signed, such as a welding set.
- Containers need not be labelled where the contents may change regularly (for example chemical process vessels and pipework which are not dedicated to one substance). In these cases the Department may need other arrangements for ensuring that employees, students and others know the dangerous properties of the contents of the container.

Where signs or labels are used they may be supplemented by additional information, such as the name of the dangerous substance or preparation and details of the hazard. The signs or labels need to be mounted on the sides that are visible, and to be durable. Labels can be in self-adhesive or painted form.

Signs or labels will be most useful at points where employees, students and others are likely to be exposed to the contents of the pipework, for example sampling or filling points, drain valves, and flanged joints which are likely to need periodic breaking. Where there are long pipe runs on which points of potential exposure are infrequent, labels or signs may also be displayed at intermediate points.

#### 5.2 Marked Areas, Rooms and Enclosures

Restricted or marked areas, rooms or enclosures used for the storage of significant quantities of dangerous substances or preparations are to be clearly identifiable by a suitable warning

sign, unless the warning labels on individual containers are clearly visible from outside or nearby. Note that marking requirements for explosives stores are dealt with in requirements arising from the **Manufacture and Storage of Explosives Regulations 2005.** 

Stores containing a number of different substances may be indicated by the 'general danger' warning sign. The signs or labels referred to above need to be positioned, as appropriate, near storage areas or on doors leading into storage rooms.

#### 5.3 Acoustic Signals and Illuminated Signs

Where acoustic signals or illuminated signs are installed and need to be activated (either automatically or in line with other safety arrangements) it is important they remain so for as long as the danger exists or until a safe condition is established.

Acoustic signals and illuminated signs need to be checked at regular intervals to ensure that they are functioning correctly. The more hostile the environment, the more frequently they will need to be checked.

An illuminated sign can be either 'on' continuously or operate intermittently (flash on and off); use the flashing sign to indicate a higher level of danger or a more urgent need for intervention or action.

The duration and frequency of flashes for an intermittent illuminated sign need to be such as to ensure the message is properly understood, and avoid any confusion with other illuminated signs, including continuous illuminated signs.

If a flashing sign is used instead of, or together with, an acoustic signal, it is important to synchronise the two. This means that the duration and frequency of flashes need to be in line with both the pulse length and interval for an acoustic signal. The choice of equipment and the way it operates will, of course, need to take account of other. For example, fast flicker rates could trigger epilepsy in some people, or in other cases some types of electronic pulse could be a danger in respect of stores containing certain explosives.

Where flashing signs are used to warn of imminent danger, it is particularly important to ensure that measures are in place to either detect failure of the sign quickly or to prevent its failure (by fitting duplicate bulbs etc).

Acoustic signals need to be set at a level which is considerably higher in terms of frequency than the ambient noise, for example 10 dB above the level of ambient noise at that frequency. However, make sure the level is neither excessive nor painful. It is also important for signals to be easily recognisable, particularly in terms of pulse length and the interval between pulses or groups of pulses.

Ensure that acoustic signals are not used more than one at a time. If a device can emit an acoustic signal at variable frequencies (this includes an intermittent signal operating on a

discrete frequency) or constant frequencies, use the variable frequency set at 10 dB above the ambient level at the appropriate frequency, to indicate a higher level of danger or a more urgent need for intervention or action.

#### 5.4 Fire Safety Signs

Fire Safety signs are defined by University Policy and Management Procedure – Fire Safety Signs, available from the HSSD website.

#### 6. TRAINING

The University will provide adequate and appropriate training to employees and students with respect to safety signs. The amount of training those employees and students need will depend on their previous experience and the type of work they will be carrying out. Training is to include:

- Recognition of hazards.
- Causes of risk.
- What the user can do to correct risks.
- Correct selection and safe use of equipment.
- Equipment limitations.
- Risk assessment process.
- Accident procedures.
- Personal security issues.
- Hygiene and dietary differences that could adversely affect their health.
- Cultural and legal differences and the possible consequences of their acts.

Visiting Tutors/Academics should be able to make informed decisions with respect to health, safety and welfare issues. They need to be competent and/or trained to recognise an inadequate or inappropriate workplace environment and take any necessary action.

#### **PROHIBITION SIGN**

A sign prohibiting behaviour likely to increase or cause danger (for example 'no access for unauthorised persons').



#### **WARNING SIGN**

No access for

industrial vehicles

A sign giving warning of a hazard or danger (for example 'danger: electricity').

Do not touch



Flammable material or high temperature\*



**Explosive material** 



Toxic material



Corrosive material



Radioactive material



Overhead load



Industrial vehicles



Danger: electricity



General danger

#### **MANDATORY SIGN**

A sign prescribing specific behaviour (for example 'eye protection must be worn').



#### **EMERGENCY ESCAPE OR FIRST-AID SIGN**

A sign giving information on emergency exits, first aid, or rescue facilities (for example 'emergency exit/escape route').





+



First-aid poster

Stretcher

Safety shower







Emergency telephone for first-aid or escape

#### **Fire Safety Signs**



Emergency fire telephone



Fire extinguisher