



# **Control of Substances Hazardous to Health (COSHH) and Dangerous Substances and Explosive Atmospheres Regulations (DSEAR) Policy**

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## 1.0 Introduction

The objectives of this policy are:

- To ensure that staff, students, contractors and visitors on Academy and Delta Academies Trust (referred to as “Delta” or “the Trust”) premises are safeguarded from injury or death from contact with hazardous substances.
- To have arrangements in place for systems and procedures to eliminate, substitute or minimise the risk of hazardous substances.
- To reduce the potential for hazardous substance emergencies to disrupt Academy business, damage premises or harm the environment.
- To ensure our academies comply with relevant legislation and standards, including:
  - The Control of Substances Hazardous to Health Regulations 2002 (as amended)
  - The Management of Health and Safety at Work Regulations 1999
  - The Health and Safety at Work Act 1974
  - The Dangerous Substances and Explosive Atmospheres Regulations 2002.
  - REACH Regulations/CLP Regulations (European Regulation on the Classification, Labelling and Packaging of Substances and Mixtures)(European Regulation (EC) No 1272/2008)

## 2.0 Policy Statement

The Trust recognises that people in the workplace may be exposed to substances that have the potential to damage their health.

Delta will not permit any hazardous substance to come into use without it first being assessed in accordance with regulation 6 of the Control of Substances Hazardous to Health.

Delta acknowledges its responsibilities under the Control of Substances Hazardous to Health Regulations and will ensure that substances that are used with Academies are assessed in line with the Regulations.

Substances at the Academies may be present because they are required within a work activity, or they may be used in maintenance activities such as cleaning, or may arise from processes in the workplace or teaching.

The Trust and any relevant Academy will also ensure that the requirements of the Dangerous Substances and Explosive Atmosphere Regulations 2002 are met, and where required will carry out a DSEAR assessment.

## 3.0 Legislation

This policy and the accompanying COSHH procedures are based on the requirements of;

- The Health and Safety at Work etc. Act 1974 (HASAWA 1974)
- The Management of Health Safety at Work Regulations 1999
- The Control of Substances Hazardous to Health Regulations 2002 (as amended).
- The Dangerous Substances and Explosive Atmospheres Regulations 2002
- REACH Regulations/CLP Regulations (European Regulation on the Classification, Labelling and Packaging of Substances and Mixtures)(European Regulation (EC) No 1272/2008)

Where reasonably practicable Delta will meet the obligations placed upon it within the legislation. The legislation applies to all people at work and other persons who may be affected by such work.

COSHH applies to virtually all substances hazardous to health; a list of exceptions can be found at **Appendix 1**.

The main objective of the COSHH regulations is to prevent workplace disease and illness resulting from exposure to hazardous substances. The regulations require an adequate assessment of the risks to health arising from work activities associated with hazardous substances, the introduction of adequate control measures, maintenance of the measures and any equipment associated with them, and monitoring of the measures and the health of employees. Examples of the effects of hazardous substances are dermatitis, asthma, infection, sensitisation, cancer and / or death.

#### **4.0 Control of Substances Hazardous to Health (COSHH)**

##### **4.1 Procedures**

Delta acknowledges that no substance can be considered completely safe. All reasonable steps will be taken to ensure that exposure of employees is prevented or controlled to within statutory limits. The Control of Substances Hazardous to Health Regulations 2002 (as amended) put duties on the Trust and individual academies to carry out the following procedures:

##### **4.2 Assessments**

COSHH assessments will be conducted on all products used and stored. Any new product will be subjected to an assessment prior to either use or storage. These assessments will be reviewed and, if necessary, amended on a regular basis.

A record of all COSHH assessments is held at the relevant site, and copies of relevant assessments are to be held on site when using the product or substance. If the use of a hazardous substance cannot be avoided or a less harmful alternative found, the Academy undertakes to control exposure by engineering means where reasonably practicable. Where exposure cannot be adequately controlled by engineering means, appropriate PPE will be provided free of charge after consultation with employees or their representatives. COSHH assessments will be reviewed where any changes occur or on an annual basis.

##### **4.3 Precautions**

Academies will not carry out work which could expose employees or students to hazardous substances without first considering the risks and the necessary precautions, and what else it needs to do to comply with COSHH.

##### **4.4 Preventing or adequately controlling exposure**

Academies will prevent employees or students being exposed to hazardous substances. Where preventing exposure is not reasonably practicable, then the academy will adequately control it. The hierarchy of control measures to be used by the Trust and its Academies are listed in **Appendix 2**.

##### **4.5 Control of Exposure**

Control of exposure will be implemented in line with the principles of good practice set out in Schedule 2A of the COSHH Regulations (**Appendix 3**).

##### **4.6 Ensure that control measures are used and maintained**

Each academy will ensure that control measures are used and maintained properly and that safety procedures are followed. This will include ensuring local exhaust ventilation extraction is tested every 14 months. For those substances that have been given an exposure limit there is a duty not to exceed the Workplace Exposure Limit (WEL).

#### **4.7 Monitoring exposure**

Where applicable the academy will monitor the exposure of employees to hazardous substances. This will include atmospheric testing where appropriate.

#### **4.8 Health Surveillance**

Where appropriate the Academy will carry out appropriate health surveillance where any assessment has shown this is necessary or where COSHH sets specific requirements. This will be specifically appropriate to staff who have are exposed to isocyanates, wood dusts and metal working fluids.

#### **4.9 Emergency plans and procedures**

Each Academy will prepare plans and procedures to deal with accidents, incidents and emergencies involving hazardous substances.

#### **4.10 Material Safety Data Sheets (MSDS)**

Under the REACH Regulations, suppliers of chemicals are obliged to provide downstream users of chemicals, such as academies within the Trust with information on the products they supply and use. The safety data sheet should be provided to the Academy the first time the chemical is provided. If the Material safety data sheet (MSDS) is updated then the Academy will require a copy of it if it has received the chemical within the last 12 months. Responsibility for ensuring the MSDS is supplied with the chemical lies with the individual purchasing the product for the first time.

#### **4.11 Dusts**

Where appropriate the risks from exposure to dusts will be evaluated and assessed, and the appropriate control and monitoring measures will be introduced.

#### **4.12 Registration, Evaluation, and Authorisation of Chemicals (REACH)**

Each Academy will, with assistant from the Health and Safety Consultant, ensure that all departments and areas of the Academy will comply with the REACH regulations. Further information on the implications of REACH is detailed in **Appendix 6**.

### **5.0 Dangerous Substances and Explosive Atmospheres**

#### **5.1 DSEAR (Dangerous Substances Explosive Atmosphere Regulations)**

Dangerous substances can put peoples' safety at risk from fire and explosion. DSEAR puts duties on Delta to protect people from risks to their safety from fires, explosions and similar events in the workplace, this includes members of the public who may be put at risk by work activity. As part of the assessment of flammable liquids and other dusts at each Academy, a risk assessment must be carried out under the Dangerous Substances Explosive Atmosphere Regulations 2002.

#### **5.2 DSEAR Risk Assessment**

Each academy will identify dangerous substances in the workplace and what the fire and explosion risks are and carry out a risk assessment of any work activities involving dangerous substances; the risk assessment will take into consideration:

- the hazardous properties of the substances;
- the way they are used or stored;
- the possibility of hazardous explosive atmospheres occurring;
- all potential ignition sources.

### 5.3 Control Measures

Where necessary each academy will put control measures in place to either remove risks or, where this is not possible, control the effects of any incidents involving dangerous substances. The academy will also provide equipment and procedures to deal with accidents and emergencies; Factors that will be considered as control measures are listed in **Appendix 4**.

### 5.4 Mitigation measures

In line with the DSEAR regulations, where appropriate, each academy will apply mitigation measures arising from the risk assessment and appropriate to the nature of the activity or operation. These may include:

- preventing fires and explosions from spreading to other plant and equipment or to other parts of the workplace;
- reducing the numbers of employees exposed to a minimum;
- in the case of process plant, providing plant and equipment that can safely contain or suppress an explosion, or vent it to a safe place.

### 5.5 Flammable Liquids

Some academies may use and store flammable liquids in significant quantities.

In order to reduce the risk of accidents involving flammable liquids, those academies will ensure that three important steps are followed:

All staff and students are adequately trained in the use of:

- Flammable liquids, including emergency procedures
- All equipment used for conveying or storing is adequate and suitable fire extinguishers are readily available and easily accessible
- Any equipment defects, spillages or accidents are reported immediately to a responsible person (e.g. Teacher, Technician, Curriculum Leader)

### 5.6 Principles of Storage

Flammable liquids can give off large volumes of flammable vapours at room temperature. These vapours, when mixed with air, can ignite, often violently. Spilled flammable liquids can, if not contained, flow a long way to an ignition source, and then flash back to the source of the leak.

Spills on clothing can represent a serious risk of injury if ignited. To help control these risks staff will follow the principles below:

- store flammable liquids in a separate storage area, or in a purpose-made bin or cupboard;
- dispense and use them in a safe place where there is good ventilation and no source of ignition;
- keep containers closed when not in use. If possible, use safety containers which have self-closing lids;
- dispense liquids over a tray and keep some non-flammable absorbent material handy to mop up spills;
- dispose of contaminated materials safely or call in disposal experts.

### 5.7 Zoned Areas

In accordance with the DSEAR regulations, each Academy will identify and classify areas of the workplace where explosive atmospheres may occur and avoid ignition sources (from unprotected equipment, for example) in those areas. All zoned areas will be marked by an 'EX' sign and control of ignition sources from electrical and mechanical equipment in those areas must be strictly adhered to by all personnel. A definition of zones is available in **Appendix 5**.

## 5.8 Equipment

It is unlikely that any academy will have a Zone rating of Zone 0 (**refer to Appendix 5**) and it is likely that the highest rated zone on any premises will be Zone 1.

Equipment brought into these zones must be rated Group II, Category 2 – equipment suitable for Zones 1, 2, or higher under the ATEX 95 Directive (94/9/EC) (**refer to Appendix 5**)

## 5.9 Fires and Spillages

Where an academy identifies the risk of a fire or a significant spillage, because of the quantity of dangerous substances on site, it will arrange:

- suitable warning (including visual and audible alarms) and communication systems;
- escape facilities, if required by the risk assessment;
- emergency procedures to be followed in the event of an emergency;
- equipment and clothing for essential personnel dealing with the incident; and, practice drills.

## 6.0 Roles and Responsibilities

Delta will support this policy for the Control of Substances Hazardous to Health.

The Academy Principal or CEO at Delta head office, is ultimately responsible for ensuring compliance with the Health & Safety at Work Act (HASAWA 1974) and the Control of Substances Hazardous to Health Regulations 2002; (COSHH 2002) (as amended), and that this policy is effective.

## 6.3 Academy Leadership Team and Managers

The Academy Leadership Team and Managers may delegate various tasks under COSHH to trained risk assessors; managers cannot delegate their managerial responsibilities to ensure that these tasks are undertaken.

The manager's duties under the COSHH Regulations 2002 and DSEAR 2002 Regulations are as follows:

- Ensuring the risks to health from hazardous substances used within or created by workplace activities are assessed.
- Ensuring a DSEAR assessment is carried out where necessary.
- Eliminating hazardous substances where possible.
- Deciding what precautions are needed.
- Preventing or adequately control exposure.
- Ensuring that control measures are used and maintained.
- Monitoring staffs' exposure.
- Arranging for appropriate health surveillance (if required)
- Preparing plans and procedures to deal with accidents, incidents and emergencies.
- Ensuring that employees are properly informed, trained and supervised.
- Keeping a list of all COSHH substances used in the department along with the associated product safety data sheets. (MSDS)

## 6.4 Technicians

Technicians are responsible for the following:

- the control and storage of hazardous substances in their department;
- for carrying out where appropriate COSHH assessments within their departments and ensuring that all hazardous substances are kept on a COSHH database;
- compiling a register of hazardous substances in their work area;
- carrying out a COSHH assessment of all substances in of substances in use their area.

## 6.5 Teachers

Should understand the potential risks regarding substances in their place of work (information available on COSHH assessment) and have read and understood the related COSHH Risk Assessments and associated product safety data sheets.

- Where relevant, carry out a COSHH assessment, or assist in completion of COSHH assessments.
- Make full and proper use of any precautions/safe systems of work put in place to eliminate/minimise the risk of exposure to substances hazardous to health. This includes wearing/using PPE in the manner for which it is intended, reporting any defects in PPE and withdrawing such items from use. Failure to do so is a breach of legislation and may result in disciplinary action against the individual.
- Ensure that students under their supervision make full and proper use of any precautions/safe systems of work put in place to eliminate/minimise the risk of exposure to substances hazardous to health. This includes wearing/using PPE in the manner for which it is intended, reporting any defects in PPE and withdrawing such items from use. Failure to do so is a breach of legislation and may result in disciplinary action against the individual.
- Ensure that students under their control are provided with adequate information on hazardous substances.
- Must report on an accident/incident form any incident involving a substance hazardous to health, examples may be, spillage of chemicals, release of noxious fumes. They must report any illness suspected of being related to exposure to a substance at work and should co-operate with any health surveillance programme established to monitor their health.
- Must familiarise themselves with any emergency procedures put in place.

## 6.6 Support Staff and Students

Should understand the potential risks regarding substances in their place of work (information available on COSHH assessment) and have read and understood the related COSHH Risk Assessments and associated product safety data sheets.

- Make full and proper use of any precautions/safe systems of work put in place by their manager/teacher to eliminate/minimise the risk of exposure to substances hazardous to health. This includes wearing/using PPE (Personal Protective Equipment) in the manner for which it is intended, reporting any defects in PPE and withdrawing such items from use. Failure to do so is a breach of legislation and may result in disciplinary action against the individual.
- Must report on an accident/incident form (and to their line manager or teacher immediately if urgent) any incident involving a substance hazardous to health, examples may be, spillage of chemicals, release of noxious fumes. They must report any illness suspected of being related to exposure to a substance at work and should co-operate with any health surveillance programme established to monitor their health.
- Must familiarise themselves with any emergency procedures put in place by their manager/teacher.

## 6.7 The Health & Safety Coordinator

- Will provide advice to individual staff or teams to enable them to complete COSHH assessments.
- Monitor and question the use of Hazard substances that COSHH Assessment may have been requested on.
- Maintain a library of information on COSHH, particularly the most recent HSE EH40 publication.
- Conduct an Audit and review of the management of hazardous substances as an integral part of the Health and Safety Policy.
- In conjunction with the Health and Safety Consultant, will ensure where appropriate that adequate controls are in place in respect of health monitoring of students, staff or anyone else that may be affected by a hazardous substance.



## **6.8 Health and Safety Consultant**

Will support and train the Health and Safety Coordinator to meet their duties.

## **7.0 Training**

Delta and each academy will give sufficient information and training to ensure full understanding of the hazards to health posed by substances in the workplace and the importance of the control measures provided, and also to ensure the health and safety of employees and students who use flammable liquids. Information will also be given to others who may be affected, such as contractors, temporary staff and visitors.

Managers and supervisors of areas that use substances hazardous to health will be given additional training to ensure the proper management of the risks.

Training in the use, handling and storage of flammable liquids will cover aspects of health and safety legislation in general.

All employees will be provided with comprehensive information and instruction on the nature and likelihood of their exposure to substances hazardous to health, including flammable liquids.

Each academy will, in consultation with staff and their representatives:

- ensure that all storage and transportation vessels are appropriate and adequate;
- provide suitable and well maintained emergency fire-fighting equipment;
- advise all employees, including new employees, who work or will work with hazardous substances including flammable liquids of the results of the assessments;
- in line with DSEAR the academy will ensure that employees are properly informed about and trained to control or deal with the risks from the dangerous substances

## **8.0 References**

Safe use and handling of flammable liquids HSG140 (Second edition) HSE Books 1996 ISBN 0 7176 0967 7

The storage of flammable liquids in containers HSG51 (Third edition) HSE Books 1998 ISBN 0 7176 1471 9

The storage of flammable liquids in tanks HSG176 HSE Books 1998 ISBN 0 7176 1470 0

UK REACH CA Information Leaflet Number 11

The Control of Substances Hazardous to Health Regulations 2002 (as amended). Approved code of practice and guidance. L5 ISBN 9780717629817

CLEAPPS – Student Safety Sheets

CLEAPPS – Laboratory Handbook and guidance

## 9.0 Appendices

### Appendix A

Hazardous substances that are exempt from the COSHH Regulations;

- Asbestos and lead, (which have their own regulation)
- Biological agents if they are not directly connected with the work and they are outside the employers control, such as:
- Substances which are hazardous only because they are:
  - Radioactive
  - Simple asphyxiants
  - At high pressure
  - At extreme temperature
  - Have explosive properties
  - Have flammable properties

### Appendix B

Where preventing exposure is not reasonably practicable, the academy will ensure that adequate controls are in place.

Each academy will:

- use appropriate work processes, systems and engineering controls, and provide suitable work equipment and materials e.g. use processes which minimise the amount of material used or produced, or equipment which totally encloses the process;
- control exposure at source (e.g. local exhaust ventilation), and reduce the number of employees exposed to a minimum, the level and duration of their exposure, and the quantity of hazardous substances used or produced in the workplace;
- provide personal protective equipment (e.g. face masks, respirators, protective clothing), but only as a last resort and never as a replacement for other control measures which are required.

### Appendix C

#### Schedule 2A

##### Principles of good practice for the control of exposure to substances hazardous to health

- a. Design and operate processes and activities to minimise emission, release and spread of substances hazardous to health.
- b. Take into account all relevant routes of exposure – inhalation, skin absorption and ingestion – when developing control measures.
- c. Control exposure by measures that are proportionate to the health risk
- d. Choose the most effective and reliable control options which minimise the escape and spread of substances hazardous to health.
- e. Where adequate control of exposure cannot be achieved by other means, provide, in combination with other control measures, suitable personal protective equipment.
- f. Check and review regularly all elements of control measures for their continuing effectiveness.
- g. Inform and train all employees on the hazards and risks from the substances with which they work and the use of control measures developed to minimise the risks.

- h. Ensure that the introduction of control measures does not increase the overall risk to health and safety.

## Appendix D

Factors that will be considered as control measures are for Dangerous Substances and Explosive Atmospheres:

- reduce the quantity of dangerous substances to a minimum;
- avoid or minimise releases;
- control releases at source;
- prevent the formation of an explosive atmosphere;
- collect, contain and remove any releases to a safe place (e.g. by ventilation);
- avoid ignition sources;
- avoid adverse conditions (e.g. exceeding the limits of temperature or other control settings) that could lead to danger;
- keep incompatible substances apart.

## Appendix E

### Definitions of zones

#### Zones

Zone 0 – a place in which an explosive atmosphere consisting of a mixture with air of dangerous substances in the form of gas, vapour or mist is present continuously or for long periods or frequently;

Zone 1 – a place in which an explosive atmosphere consisting of a mixture with air of dangerous substances in the form of gas, vapour or mist is likely to occur in normal operation occasionally;

Zone 2 – a place in which an explosive atmosphere consisting of a mixture with air of dangerous substances in the form of gas, vapour or mist is not likely to occur in normal operation but, if it does occur, will persist for a short period only;

## Appendix F

### REACH

REACH stands for Registration, Evaluation, and Authorisation of Chemicals. It is the new EU Chemical legislation, which came into force on 1st June 2007.

From 1<sup>st</sup> December 2008, chemicals that are manufactured or imported into the EU must be registered with the European Chemical Agency (ECHA) in Helsinki.

REACH aims to make the people who place chemicals on the market (mainly manufacturers and importers) responsible for understanding and managing the risks associated with their use. REACH is aimed at simplifying the control of chemicals in the European marketplace. It replaces a patchwork of European Directives with a single system. Different types of chemicals are considered in different ways by the legislation, and some are exempt, because they are already covered by specific laws.

### Inventory

The Trust may consider drawing up an inventory of all the chemicals used in its premises, but it is unlikely that the Delta will be affected by the implementation of REACH as the Trust does not rely on using chemicals that are uncommon. Where deemed appropriate the Trust or its academies will contact it's supplier to find out if the chemical(s) in question have been pre-registered or registered by the manufacturer or supplier to ensure that the Trust uses are covered by the registration. Where there is any doubt, the Trust or its academies will consult its suppliers.