

# **Health and Safety Procedure**

For: Heads of all Establishments/Settings OCC Managers Governors/Management Committees Trade Union Safety Representatives Employee Notice Boards Intranet



## DANGEROUS SUBSTANCES & EXPLOSIVE ATMOSPHERES

#### **LEGISLATION**

Dangerous Substances & Explosive Atmospheres Regulations 2002 (DSEAR) The Regulatory Reform (Fire Safety) Order 2005 Management of Health & Safety at Work Regulations 1999 (as amended)

## **Purpose**

The purpose of this procedure is to ensure that Oxfordshire County Council establishments/settings prevent fires, explosions or similar events that can occur when certain dangerous substances are present in the workplace.

### Scope

The procedure applies to managers in any Council location where substances such as dangerous substances and explosive atmospheres, are present.

**Dangerous substances** include: Petrol, LPG, oxygen, paints, varnishes, solvents and certain dusts, which when mixed with air can create an explosive atmosphere.

**Explosive atmosphere** is an accumulation of gas, mist, dust or vapour, mixed with air, which has the potential to catch fire or explode.

The DSEAR Regulations are about managing the risks of fire and explosion.

### Managers' Responsibilities

.Where these dangerous substances are present managers must:

- Arrange for a competent person to carry out a risk assessment of any work activities involving dangerous substances/explosive atmospheres.
- Ensure measures to eliminate or reduce risks are implemented as far as is reasonably practicable.
- Ensure that suitable and sufficient equipment and procedures are provided to deal with accidents and emergencies.
- Ensure regular workplace inspections are carried out and recorded to ensure that the identified control measures as identified by the DSEAR risk assessment are being implemented.

Issued by Shared Services Health and Safety Team, Unipart House, Garsington Road, OXFORD, OX4 2GQ



- Provide information and training to employees.
- Ensure that the nominated person classifies the places where explosive atmospheres may occur into zones and mark the zones where necessary.

### **A Competent Person**

A competent person is someone who has the sufficient training and experience or knowledge and other qualities that allow them to assist you (Manager) properly. The level of competence required will depend on the complexity of the situation and the particular help you need.

When identifying the competence levels Managers should give preference to those in their own organisation who have these appropriate levels of competence before looking for help from an external source.

**NB:** It is also a legal requirement to consult health and safety representatives in good time on the arrangements for competent help and the risk assessment process.

#### **Risk Assessment**

The risk assessment should entail an identification and careful examination of the dangerous substances present or liable to be present in the workplace; the work activities involving them; and how they might fail and cause fire, explosion or a similar event that could harm employees and the public. The assessment should take into account the hazardous properties of the substances (e.g. certain dusts can spontaneously combust); the way in which substances are stored (e.g. LPG should be stored outside in a secure way); the possibility of hazardous explosive atmospheres occurring; and all potential ignition sources. Non-routine activities such as maintenance work should be assessed as well as routine work activities.

#### **Control measures**

- Eliminate the risk where possible; if not
- Substitute a dangerous substance with something less risky e.g. a solvent with a lower flashpoint
- Reduce the quantity of substance stored or used
- 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 extraction)
- Avoid ignition sources
- Avoid adverse conditions that could lead to danger (e.g. exceeding temperature limits)
- Keep incompatible substances apart

### Training, instruction information and supervision

Employees need to be given training and instruction in the use of any equipment or substances; information such as the name of the substances in use and access to any relevant safety data sheets; the findings of the risk assessment and any written procedures. Managers must ensure that staff follow safe systems of work.

# **Employees' Responsibilities**

Employees must co-operate with the employer by:

- Attending relevant training
- Following safe working procedures
- Reporting any defects in equipment e.g. extraction systems
- Wearing any personal protective equipment supplied

| For further information and advice:   |  |              |
|---------------------------------------|--|--------------|
|                                       | email and web addresses  |              |
| Specialist:                           |  |              |
| HSE                                   | Fire and explosion – How safe is your workplace?  www.hse.gov.uk   |              |
| HSE                                   | Dangerous Substances and Explosive Atmospheres Regulations (DSEAR) – L138  |              |
| General:                              |  |              |
| Health, Safety<br>& Wellbeing<br>Team | email: healthandsafetyhelp@oxfordshire.gov.uk web address: http://intranet.oxfordshire.gov.uk/links/intranet/healthandsafety | 01865 797222 |