

## **HAZARDOUS SUBSTANCES**

### **1. INTRODUCTION**

Systems of work involving the use of, or coming into contact with, substances hazardous to health must, as far as is reasonably practicable, be safe, under the requirements of the Health and Safety at Work etc. Act 1974 and the Control of Substances Hazardous to Health Regulations 2002. In order to comply with these statutory requirements and to promote good working practice the Isle of Wight Council has formally adopted this policy.

### **2. ARRANGEMENTS FOR SECURING THE HEALTH AND SAFETY OF WORKERS**

The Isle of Wight Council will, through their managers, in consultation with employees and their representatives implement the following measures to secure the health, safety and welfare of all members of staff who work with or come into contact with substances hazardous to health.

- a) An inventory of all substances hazardous to health will be kept at each workplace, with appropriate hazard information (Safety Data Sheet).
- b) Competent, trained persons will be appointed to carry out risk assessments of the exposure to substances to health and advise on their control.
- c) All operations that involve, or may involve exposure to substances hazardous to health will be assessed and appropriate control measures taken, where elimination or substitution of the hazardous substance is not possible.
- d) Engineering controls will be properly maintained and monitored to ensure their continued effectiveness. This will be achieved by planned preventive maintenance and performance monitoring and testing as required by statute.
- e) All employers, and others who may work in affected areas, will be informed of the purpose and safe operation of all engineering controls.
- f) Personal Protective Equipment (PPE) will only be used as a last resort or back up measure during testing, maintenance or modification of other controls, or where the use of engineering controls is not practicable.
- g) The type and use of PPE will be carefully assessed and maintained according to the manufacturers' instructions and in line with the requirements of the Personal Protective Equipment at Work Regulations 1992 (see section 2.26).
- h) Each assessment will be reviewed annually and all operations using hazardous substances will be reassessed every three years.
- i) Health surveillance, where indicated to be necessary by the assessment, will be carried out by the Councils' appointed occupational health advisors.
- j) All employees will be provided with comprehensible information and appropriate training on the nature of the hazardous substances with which they are working and will be informed about any monitoring and health surveillance results.
- k) Any change to control measures and changes will be properly assessed and no new substance or process will be introduced into the workplace without prior assessment.

### **3. PROCEDURES FOR DEALING WITH HEALTH AND SAFETY ISSUES**

Where an employee raises a point related to the use of substances hazardous to health managers will:

- a) Ensure that the hazard associated with the substance has been correctly identified
- b) Ensure that the assessment of the use of the substance is correct and up to date
- c) Ensure that the control measures in place are adequate.
- d) Correct any observed deficiencies in the control of the hazard.
- e) Inform the employee and his /her representative where appropriate, of the results of the investigation and actions taken.

In the event of an identified exposure, those affected and their managers and representatives, will be informed as soon as practicable. Possible health effects will, in addition be communicated to the Council's occupational health advisers and the employees own general practitioner.

### **4. INFORMATION AND TRAINING**

The I W Council will ensure that employees receive sufficient training and information to ensure full understanding of the hazards to health posed by the substance in the workplace and the importance of control measures provided. Information will also be given to others who may be affected such as contractors and temporary staff. Managers and supervisors will be given additional training to ensure that they are able to manage risks properly.

### **5. SAFE SYSTEM OF WORK**

Poorly maintained or adjusted control measures can result in inadvertent exposure to substances hazardous to health. Employees should be encouraged to report defects and systems must be in place for prompt repair and for the provision of temporary replacement controls. The following steps can be taken to minimise risk:

- a) Ensure hazard information is kept up to date.
- b) Ensure assessments are reviewed annually and reassessed every three years or when material changes are made.
- c) Ensure employees are trained in the nature of the hazards and control measures
- d) Ensure control measures are maintained and monitored.
- e) Ensure all documentation is comprehensive and comprehensible.
- f) Encourage employees to report faults and problems.

### **6. EMPLOYEES RESPONSIBILITIES**

- a) Employees are responsible for informing his/her immediate line manager of any health concerns arising from the use of hazardous substances at the earliest opportunity.
- b) All employees must comply with any advice, procedures or control measures introduced in order to reduce or eliminate the health risks identified in the COSHH assessment. Any substance brought in from home must be approved for use by the employees manager.

- c) Employees are required to utilise, in a full and proper manner, PPE issued to them and to report any defect or loss.

## **7. SUMMARY**

Modern working methods may involve the use of substances that pose a risk to health of people using them. No chemical is completely safe in all circumstances in addition airborne dust, in significant quantities and microbiological hazards can damage health.

Since the hazards to health posed by many substances may not be known it is good practice to use working methods to minimise exposure. Where specific steps can be taken.

The seven most important steps are:

- a) Identify the hazard
- b) Assess the risk
- c) Eliminate, prevent or control the risk
- d) Maintain and monitor the controls
- e) Ensure assessments and control measures are kept up to date
- f) Inform and train the employees

## **HAZARDOUS SUBSTANCES – GUIDANCE**

The Control of Substances Hazardous to Health Regulations 2002 provide a framework for employers to follow when considering the protection of staff in the workplace against health risks from hazardous substances.

Complying with COSHH regulations involves:

1. Assessing the risks to health.
2. Deciding what precautions are needed.
3. Preventing or controlling risks.
4. Ensuring control measures are used properly and maintained correctly.
5. Monitoring exposure.
6. Informing, instructing and training employees.
7. Recording and Reviewing Assessments.

### **1. ASSESSING THE RISKS TO HEALTH**

This is an essential requirement for all employers, and needs to be approached in a systematic way, so that you can be sure of protecting the health of people who could be harmed by your work activities. Before undertaking full COSHH assessments, managers should make an inventory and decide whether any items can be disposed of.

The steps, which need to be followed to make valid assessments, are set out below:

Gather information about the substances the work and working practices. It will be essential to obtain a safety data sheet for the substance. The assessment must consider:

- (a) What substances are brought into the workplace to be used/stored/worked on?
- (b) What substances are given off as fumes, vapours dusts or likely to be spilled during the work activity.
- (c) The substances produced at the end of any work or process such as waste and residues.

No substance, which presents a hazard to health, will be used until a full assessment has been conducted and any preventive measures implemented. For the purpose of COSHH, substances hazardous to health include:

- (a) Substances and preparations listed as very toxic, toxic, harmful, corrosive, irritant under the Chemicals (Hazard Information & Packaging for Supply) Regulations.
- (b) Substances with occupational exposure limits.
- (c) Harmful micro-organisms such as Legionella, hepatitis virus, leptospirosis.
- (d) Dusts of any kind in substantial concentrations.
- (e) Any other substance creating comparable hazards to health, such as pesticides.

It will be necessary to consider the significant risks from hazardous substances and this will require looking at:

- (a) Where and how they are used, handled or may be released.
- (b) Who might be affected and to what extent.
- (c) How the substance can enter the body, through inhalation, ingestion or by being absorbed through the skin.

2. **DECIDING WHAT PRECAUTIONS ARE NEEDED.**

Employers must not carry out any work that could expose employees to hazardous substances unless they have carried out an assessment and introduced the necessary precautions. It will be necessary to examine the preventive and control measures that are already in place and check that they are effective in controlling the risk. Safety data sheets will set out a number of preventative and control measures for substances used at work.

3. **PREVENTING AND CONTROLLING RISKS**

If it is reasonably practical, prevent exposure to hazardous substances by:

- (a) Eliminating the process or activity so that the hazardous substance is not required or generated.
- (b) Replacing it with a safer alternative.
- (c) Using a safer form e.g. pellets instead of powder.
- (d) Investigating the availability of immunisation to protect against microbiological hazards.

If prevention is not reasonably practicable, then the risk of exposure must be controlled by one or more of the following measures:

- (a) Total enclosure of the process.
- (b) Partial enclosure and use of extraction equipment.
- (c) General ventilation and localised exhaust ventilation.
- (d) Using systems of work and handling procedures that minimise the chance of leaks, spills or other escape of hazardous material.

If exposure cannot be adequately controlled by the above measures then personal protective equipment should be provided although this should be viewed as a last resort.

4. **ENSURING CONTROL MEASURES ARE USED PROPERLY & MAINTAINED CORRECTLY**

COSHH places specific responsibilities on employers to ensure that controls are kept in efficient working order and good repair. Engineering controls and respiratory protective equipment have to be examined and in some cases tested at set intervals eg fume cupboards must be tested every 14 months.

## 5. **MONITORING EXPOSURE**

COSHH requires monitoring the exposure of workers to hazardous substances in certain cases eg:

- (a) Where there could be serious risks to health if the control measures failed.
- (b) If you cannot be sure that exposure limits are not being exceeded.
- (c) Where you are unsure that particular control measures are working properly.

COSHH also requires employers to arrange health surveillance for employees, in its simplest form this may require supervisors to check employees skin for dermatitis or could mean examinations of employees by doctors. See Section 2.17 on Health Surveillance.

Records should be kept of all maintenance, test and health surveillance, which is carried out.

## 6. **INFORMING, INSTRUCTING AND TRAINING EMPLOYEES**

COSHH requires you to inform, instruct and train staff about:

- (a) The nature of the substances they work with and the risks created by exposure.
- (b) The precautions they should observe.

You should give staff sufficient information and instruction on:

- (a) Control measures, their purpose and how to use them.
- (b) How to use personal protective equipment provided.
- (c) Emergency procedures.

## 7. **RECORDING AND REVIEWING ASSESSMENT**

All COSHH assessments should be recorded in writing. Three forms are provided for managers to use when recording COSHH assessments. An assessment form for packaged substances, an assessment form for harmful processes and a form for micro-biological hazards. These are included at the end of this guidance document.

Safety data sheets should be attached to completed COSHH assessment forms, they will contain information regarding first aid measures and fire fighting advice (Such sections should be highlighted so they can be easily identified) which may be required immediately in an emergency situation. It is important that all employees know where the assessments and safety data sheets can be found. In certain circumstances medical staff will require sight of safety data sheets to give prompt, effective treatment. Managers should consider duplicating relevant COSHH records.

Assessments should be reviewed regularly but not less than every 3 years, and whenever there is reason to believe that it is no longer valid or where there has been a significant change in the work.

***A safety data sheet must be obtained and attached to this form before the assessment can be undertaken and substance used***

**1. Substance Information**

**a ) Workplace**

**b ) Substance**

**c ) Container Size**

**d ) Used for**

**e ) Frequency: Daily  Weekly  Monthly  Other.....**

**2. Assessment of Risk**

**a ) Does the substance present a hazard to health when used?      Yes       No**

**If yes what are the risks? .....**

.....  
.....

***If no, you do not need to take the assessment any further.***

**b ) Can use of the substance be eliminated?      Yes       No   
(If yes eliminate use of the substance)**

**c ) Can the substance be substituted for a less hazardous substance?      Yes       No   
( If yes introduce a safer alternative reassess)**

**d ) Has the substance been assigned an Occupational Exposure Standard of Limit?      Yes       No**

**3. Instructions for Safe Use**

**The minimum safety precautions to be followed will be those set out in the safety data sheet or product label. Advice on additional measures which may be required is set out overleaf.**

.....  
.....  
.....  
.....  
.....  
.....  
.....  
.....

**Safety briefing by manager/supervisor: Yes  No  Date:**

When assessing what safety precautions are needed follow the hierarchy of measures set out below:

	Appropriate	Available for use
Totally enclosing the process or handling system	Yes <input type="checkbox"/> No <input type="checkbox"/>	Yes <input type="checkbox"/> No <input type="checkbox"/>
Use of local exhaust ventilation (LEV)	Yes <input type="checkbox"/> No <input type="checkbox"/>	Yes <input type="checkbox"/> No <input type="checkbox"/>
Adequate general/natural ventilation	Yes <input type="checkbox"/> No <input type="checkbox"/>	Yes <input type="checkbox"/> No <input type="checkbox"/>
Respiratory protective equipment (RPE)	Yes <input type="checkbox"/> No <input type="checkbox"/>	Yes <input type="checkbox"/> No <input type="checkbox"/>
Personal Protective Equipment (PPE)	Yes <input type="checkbox"/> No <input type="checkbox"/>	Yes <input type="checkbox"/> No <input type="checkbox"/>
Correct Storage Facility	Yes <input type="checkbox"/> No <input type="checkbox"/>	Yes <input type="checkbox"/> No <input type="checkbox"/>
Maintenance of Equipment	Yes <input type="checkbox"/> No <input type="checkbox"/>	Yes <input type="checkbox"/> No <input type="checkbox"/>
Staff Training	Yes <input type="checkbox"/> No <input type="checkbox"/>	Yes <input type="checkbox"/> No <input type="checkbox"/>
Information to users/visitors/contractors	Yes <input type="checkbox"/> No <input type="checkbox"/>	Yes <input type="checkbox"/> No <input type="checkbox"/>
First Aid treatment/Advice	Yes <input type="checkbox"/> No <input type="checkbox"/>	Yes <input type="checkbox"/> No <input type="checkbox"/>

**4 Instructions for Safe Storage**

.....

.....

.....

.....

**5 Action Required to Introduce Control Measures**

.....

.....

.....

.....

.....

.....

By Whom.....

Assessment carried out by.....

Date.....

**COSHH Assessment Form  
(Processes)**

**HS2.05B**

*Where a hazardous substance is used during the process a safety data sheet must be obtained & attached to this form before the assessment can be undertaken.*

**1. Process Information**

a) Workplace

b) Process

c) Frequency: Daily  Weekly  Monthly  Other.....

**2. Assessment of Risk.**

a) Does the process use/produce substances or by-products hazardous to health when undertaken ? Yes  No

If yes state the substances.....

And what are the risks?.....

b) Is there an occupational exposure limit/standard relevant to the substances used/produced by the process ( Safety Matters (IW) can give further advise regarding this issue ) Yes  No

***If no, you do not need to take the assessment any further.***

b) Can the process be eliminated ? (If yes eliminate the process) Yes  No

c) Can the hazardous substance be substituted for a less hazardous substance ? (If yes introduce a safer substance & reassess) Yes  No

**3. Safety Instructions when Undertaking process.**

The minimum safety precautions to be followed will be those set out relevant safety data sheets or product labels. Advice on additional measures, which may be required, is set out overleaf.

.....  
.....  
.....  
.....

Safety briefing by manager/supervisor: Yes  No  Date

When assessing what safety precautions are needed consider the following hierarchy of measures:

	Appropriate Yes <input type="checkbox"/> No <input type="checkbox"/>	Available for use Yes <input type="checkbox"/> No <input type="checkbox"/>
Totally enclosing the process or handling system	Yes <input type="checkbox"/> No <input type="checkbox"/>	Yes <input type="checkbox"/> No <input type="checkbox"/>
Use of local exhaust ventilation (LEV)	Yes <input type="checkbox"/> No <input type="checkbox"/>	Yes <input type="checkbox"/> No <input type="checkbox"/>
Adequate general/natural ventilation	Yes <input type="checkbox"/> No <input type="checkbox"/>	Yes <input type="checkbox"/> No <input type="checkbox"/>
Respiratory protective equipment (RPE)	Yes <input type="checkbox"/> No <input type="checkbox"/>	Yes <input type="checkbox"/> No <input type="checkbox"/>
Personal Protective Equipment (PPE)	Yes <input type="checkbox"/> No <input type="checkbox"/>	Yes <input type="checkbox"/> No <input type="checkbox"/>
Correct Storage Facility	Yes <input type="checkbox"/> No <input type="checkbox"/>	Yes <input type="checkbox"/> No <input type="checkbox"/>
Maintenance of Equipment	Yes <input type="checkbox"/> No <input type="checkbox"/>	Yes <input type="checkbox"/> No <input type="checkbox"/>
Staff Training	Yes <input type="checkbox"/> No <input type="checkbox"/>	Yes <input type="checkbox"/> No <input type="checkbox"/>
Information to users/visitors/contractors	Yes <input type="checkbox"/> No <input type="checkbox"/>	Yes <input type="checkbox"/> No <input type="checkbox"/>
First Aid treatment/Advice	Yes <input type="checkbox"/> No <input type="checkbox"/>	Yes <input type="checkbox"/> No <input type="checkbox"/>

**Action required to introduce control measure**

.....

.....

.....

.....

.....

.....

.....

.....

**By whom** .....

**Assessment carried out by** ..... **Date** .....

**1. Identification of Hazard**

- a) Workplace .....
- b) Name of Micro-Biological Hazard .....
- c) Mode of Transmission .....
- d) Contact Activities .....
- .....
- f) Signs & Symptoms of Infection .....
- .....

**2. Elimination/Reduction of Risk.**

- a) Can the risk of infection be eliminated/reduced? Yes  No
- b) If yes how will this be achieved.....
- .....

**3. Measures to Prevent/Minimise Infection**

- a) Is immunisation available? Yes  No
- b) Have staff been offered immunisation Yes  No
- c) Has a PPE assessment be undertaken? Yes  No
- d) Is the correct PPE available for use? Yes  No
- e) Can infected waste be disposed of properly?  
( ie provision of sharps boxes/yellow bags) Yes  No
- f) Have staff received information and training in  
correct methods of avoiding infection? Yes  No
- g) Safety briefing by manager/supervisor: Yes  No  Date:
- h) List the preventive measures to be observed to protect from this micro-biological hazard:  
.....  
.....  
.....

Assessed by..... Date .....