

## Plant and Equipment Procedures

### 1. Preamble

The University of Western Sydney recognises its obligation to comply with regulations, design, manufacture and operations of all Plant and Equipment.

### 2. Definition

**2.1 Plant:** Is a general term for machinery, tools, appliances and equipment. It can include items as diverse as presses in a foundry and computers in an office. It can range from scaffolding to lifts; from tractors to hand trolleys; cranes to mobile platforms; welding equipment to electric drills; office computers to photocopy machines and stapling devices; boilers to lathes and drilling machines.

**2.2 Competent Person:** A competent person is someone who has received formal instruction in the safe operation of the item of plant. Formal instruction includes:

- (i) training by the manufacturer
- (ii) TAFE qualifications/tertiary qualification
- (iii) a person who has demonstrated extensive industry experience on the operation of the item of plant and who can demonstrate a knowledge of the safe operation of the item of plant

### 3. Aims

3.1 The objective of this policy, in accordance with the national standard, is to protect the health and safety of persons from hazards arising from plant and systems of work associated with plant to:

- (i) ensure that hazards associated with the use of plant in the workplace are identified and risks to health and safety are assessed and controlled;
- (ii) eliminate or, where this is not practicable, minimising risks to health and safety arising from plant;
- (iii) specify requirements with respect to the design, manufacture, testing, installation, commissioning, use, repair, alteration, dismantling, storage and disposal of plant;
- (iv) require the provision of relevant information, training and supervision;

- (v) require a process of consultation with employees and others likely to be exposed in relation to risks arising from plant and systems of works associated with plant; and
- (vi) require the registration of certain plant designs and items of plant.

### **3.2 Legislation**

- (i) The regulations impose a mandatory requirement for all employers to under-take a risk management process that specifically details all risks associated with plant in the workplace. A risk management process is a systematic method for making plant as safe as possible and to provide essential information to employees on the safe use of plant in the workplace.
- (ii) The risk assessment process is to follow the basic four step approach:

### **3.3 Identification of The Risks**

- (i) Identifying all plant and equipment in the workplace and identifying all hazards associated with the particular plant and plant related systems of work.

### **3.4 Assessing The Risks**

- (i) Assess the risks they pose to health and safety (Ref: Hazard Identification, Risk Assessment and Control Procedures and Risk Prioritisation Model Attachment 2).

### **3.5 Controlling The Risks**

- (i) Decide on the use of appropriate risk control measures.
- (ii) Introduce necessary control to ensure that the risk of injury or disease is eliminated or, if this is not practicable, minimised to an acceptable level.

### **3.6 Monitoring and Reviewing the Process**

- (i) Implement a method of periodically reviewing the plant management strategies.

## **4. Responsibilities**

### **4.1 Senior Executives, Heads of Academic Units/Schools and Heads of Departments are responsible for:**

- (i) Referencing Inspection Criteria (Attachment 1) to ensure completion of the Inspection Worksheet (Attachment 2) and forwarding a copy to the OH&S Co-ordinator.
- (ii) Developing and implementing a formal plan for controlling identified risks.
- (iii) Monitoring the progress of the plan and taking corrective action, as required.

**4.2 Line Managers** are responsible for:

- (i) Ensuring documented work practices are developed.
- (ii) Developing and documenting a list of Authorised Competent Persons.
- (iii) Ensuring no employee is permitted to operate or maintain any plant/equipment unless they have received appropriate training and hold a certificate of competence, as required.
- (iv) Monitoring compliance with established procedures.

## **5. Records**

- 5.1 Records and details of assessments undertaken and training provided are to be maintained and made available upon request by relevant authorities, i.e. UWS OHS&R Unit, WorkCover NSW.
- 5.2 Due to the wide variances in equipment, the following criteria, that is not exhaustive, should be used as a basis to assist in the health and safety hazard recognition process. In addition, the criteria have been designed to assist in determining where review by technical specialists may be required.

**Inspection Criteria  
Attachment 1**

**1.1 Potential Mechanical Hazards**

- (i) Pinch points guarded
- (ii) Exposed moving parts guarded
- (iii) Correct lifting devices
- (iv) Rotating parts balanced
- (v) Sharp cutting edges guarded
- (vi) Maintenance access provided
- (vii) Interlocks included (e.g. limit switched)
- (viii) Isolation procedure
- (ix) System failure – alarm

**1.2 Potential Electrical Hazards**

- (i) Applicable Australian Standards complied with
- (ii) Equipment earthed
- (iii) Static electricity corrected
- (iv) Guarded fault interrupters
- (v) Switches correctly labelled
- (vi) Exposed conductors guarded
- (vii) Explosion proof
- (viii) Power failure automatic restart - safety devices
- (ix) Emergency stop controls - what do they stop?

**1.3 Potential Pressure Hazards**

- (i) Gauges properly located and legible
- (ii) Relief devices
- (iii) Safe operating limits marked on gauges and controls
- (iv) Temperature, pressure and material regulators
- (v) Discharge relief ports, blow-outs and vents directed correctly
- (vi) Pressure vessel cooled
- (vii) Internal pressure release when system shut down
- (viii) Pressurised equipment correctly shielded

**1.4 General Hazards**

- (i) Mobile equipment traffic flow defined
- (ii) Warning devices on equipment
- (iii) Hot work permit required

- (iv) Equipment or process safe if air, steam, electricity or vacuum fails
- (v) Emergency power and lighting
- (vi) Adequate lighting
- (vii) Barricades and/or guards adequate and secure
- (viii) Warning signs
- (ix) Handrails and guard-rails
- (x) Drainage adequate
- (xi) Pedestrian areas free access and egress provisions appropriate
- (xii) Personal protective equipment
- (xiii) Isolation procedures
- (xiv) Tag out/lock out procedures
- (xv) Documented operating and maintenance procedures
- (xvi) Emergency procedures documented, posted, tested and reviewed
- (xvii) Routine maintenance
- (xviii) Defect reporting
- (xix) Layout and condition of workplace environment
- (xx) Work organization

#### **1.5 License Requirements**

- (i) Capabilities
- (ii) Skills and experience

#### **1.6 Registration Requirements - Ergonomics**

- (i) Thermal comfort
- (ii) Seating
- (iii) Fatigue
- (iv) Noise
- (v) Access and egress
- (vi) Weight
- (vii) Vibration
- (viii) Maneuverability
- (ix) Biomechanics
- (x) Ventilation
- (xi) Relationship between display and control instructions

**Inspection Worksheet  
Attachment 2**

Academic Unit/School/Department: ..... Date: .....

Carried out by: ..... Position: .....  
*Name*

Plant/Equipment	Task Performed	Identify Hazard	Assess Risk	Control Measures	Legal Requirement