

# Health Safety and Wellbeing - Plant and Equipment Management Procedure

## Section 1 - Purpose / Objectives

- (1) Ensure that Victoria University has a system established to eliminate or minimise risk of injury, as far as reasonably possible, to all employees, students, contractors and volunteers from using plant and equipment.
- (2) Define plant and equipment to which this procedure is relevant.
- (3) Describe plant and equipment safety management system which will be used to identify, assess and control the hazards arising from use of plant and equipment.
- (4) Provide instruction on controlling hazards in relation to plant or equipment other than those which rely exclusively on manual power and are designed to be supported by hand.

## Section 2 - Scope / Application

- (5) This procedure applies across the University.

## Section 3 - Definitions

- (6) Nil

## Section 4 - Policy Statement

- (7) Nil

## Section 5 - Procedures

### Part A - Roles/Responsibilities

Roles	Responsibility
-------	----------------

Everyone working at VU	<ul style="list-style-type: none"> <li>- Take care to undertake work with plant and equipment within their competency and licensing limitations.</li> <li>- Follow manufacturer's instructions on safe use and limitations of use of all plant and equipment.</li> <li>- Use plant and equipment only within the parameters of established safe operating procedures.</li> <li>- Attend training to establish competency in the use of plant and equipment particularly where licensing is required.</li> <li>- Conduct pre-start checks to ensure plant and equipment is serviceable prior to commencing any work.</li> <li>- Report any hazards or faults found with plant and equipment and 'tag out' faulty equipment to ensure others are aware of the fault immediately.</li> <li>- Notify verbally and in writing, using the VU OHS Incident Recording System provided, of any hazard with potential to, or incident which has, caused injury, illness or damage to the work environment.</li> </ul>
Executives and Leaders	<ul style="list-style-type: none"> <li>- Encourage discussion and introduction of innovative identification and control of plant and equipment hazards.</li> <li>- Monitor information on hazards in use of plant and equipment.</li> <li>- Ensure availability and allocation of safe plant and equipment that is fit for the purpose for which it will be used.</li> </ul>
Managers and Supervisors	<ul style="list-style-type: none"> <li>- Identify particular items of plant and equipment that will be used as part of specific job roles, ensure licensing and competency is described specifically within job descriptions as required.</li> <li>- Purchase plant and equipment that is fit for purpose, meets the minimum requirements of appropriate Australian Standards and the pre-purchase checklist provided by the University, prior to ordering any new plant or equipment.</li> <li>- Ensure instruction, training and supervision is provided to all employees, students and others to eliminate or minimise hazards present in the use of plant and equipment, this includes conducting risk assessments, displaying safe operating procedures and providing training as required.</li> <li>- Inspect plant and equipment user's licenses or evidence of competency prior to allowing staff or students to use plant or equipment.</li> <li>- Maintain plant and equipment in line with manufacturer's recommendations, risk assessments and Australian Standards.</li> <li>- Instruct and monitor staff with responsibility for plant and equipment in the requirements of safe management of all plant and equipment.</li> </ul>
Teachers, Academic Staff and Researchers	<ul style="list-style-type: none"> <li>- Provide induction, instruction, training and supervision to minimise hazards relating to use of plant and equipment.</li> <li>- Supervise pre-start checks of any plant or equipment to be used in University activities.</li> <li>- Research within industry and other tertiary education providers the most appropriate plant for the intended purpose.</li> <li>- Purchase plant and equipment that is fit for purpose, meets the minimum requirements of appropriate Australian Standards and the pre-purchase checklist provided by the University, prior to ordering any new plant or equipment.</li> <li>- Notify verbally and in writing, using the VU OHS Incident Recording System provided, of any hazard with potential to, or incident which has, caused injury, illness or damage to the work equipment or environment.</li> </ul>

OHS Team	<ul style="list-style-type: none"> <li>- Provide advice on minimising hazards in the purchase, installation, maintenance and use of plant and equipment.</li> <li>- Refer staff purchasing plant to suitably qualified professionals for advice on most suitable plant and equipment for the intended purpose where expertise is required beyond what is available within the team.</li> <li>- Ensure distribution of any information on plant and equipment safety controls, issue alerts and improve safe operating procedures where necessary.</li> <li>- Monitor compliance with this procedure and all aspects of plant and equipment safe purchase, installation and use at the University.</li> </ul>
----------	--

## Part B - Procedures

(8) This procedure provides practical guidance on how to manage health and safety risks of plant from pre-purchase checks, plant installation, commissioning and operation through to decommissioning and dismantling.

(9) Within this procedure plant includes any machinery, equipment, appliance, implement and tool, and includes any component or anything fitted or connected to any of those things. Plant includes items as diverse as lifts, cranes, machinery, conveyors, forklifts, vehicles and power tools.

(10) Plant that relies exclusively on manual power for its operation and is designed to be primarily supported by hand, for example a screw driver or chisel, is not covered by this procedure.

(11) All plant and equipment will be listed in a register and be part of the Plant Risk Management Plan for the University. The plant risk management plan includes: pre-purchase checklist; inclusion on the plant register; installation and commissioning; plant risk assessment; safe operating procedure where required; inspection and maintenance schedule; records of de-commissioning and disposal of plant.

### Pre — Purchase or Hire Risk Management

(12) Prior to introducing plant whether it is new or second hand, purchased or hired, received from a donation or any other procurement process, all hazards must be identified using plant pre-purchase checklist. All items identified as relevant on the checklist must be actioned prior to purchase of plant or equipment.

(13) It is mandatory to complete a plant pre-purchase checklist to address the items listed below:

- Proposed plant suitable for its intended use and the environment it will be used in.
- Manufacture / vendor risk assessment document is available detailing the hazards and risks associated with storage, transport, installation and commissioning of the plant.
- Controls required to be put in place for identified hazards from the risk assessment including: noise, dust, fumes, heat and other emissions from the plant.
- Details of any modifications to the plant that maybe required to make it suitable for the use intended or to fit into the environment it will be used in.
- Details of any modifications to the built environment that maybe required to make it suitable for location of the plant including ventilation, lighting, temperature control, restriction of access, maintenance access, provision of power or fuel, waste disposal, emergency response systems.
- If the plant is second hand, written details of service history, modifications made to the plant and approval by the manufacturer for the modifications, general condition report that specifies if the plant is supplied only for spare parts or scrap must be obtained.
- Precise requirements for any special skills, high risk work licenses or ancillary equipment required to deliver and install, inspect and commission or maintain the plant must be provided.

- h. Precise requirements for any special skills, licenses or other requirements to operate the plant must be recorded.
- i. When hiring equipment the supplier must provide a log book or maintenance record book, the manufacturers' information and user manual, any inspections and maintenance due during the hire period must be clearly identified and responsibility agreed within the hire contract.
- j. Protective equipment or accessories required to operate, inspect or maintain the plant must be available.

## **Installation**

(14) Deficiencies discovered during the pre-purchase or hire management process must be rectified prior to installation and the plant must be operationally safe. All installation must conform to safety specifications, manufacturer's instructions and be suitable for local environmental factors.

(15) All electrical installations associated with the plant must comply with Australian Standards as relevant. During installation inspections and consultation on any previously unidentified hazards should take place prior to commissioning the plant. Controls must be introduced at this point in time especially modifications to the plant to make it fully operational for the purpose it is intended and to meet local environmental conditions.

## **Registration**

(16) All plant and equipment must be listed in the plant and equipment register for the College or Department of the University it is used by using the approved template Plant & Equipment Register.

## **Commissioning**

(17) Commissioning includes recommissioning of plant and is done to ensure the plant is in safe working order. Commissioning includes testing:

- a. That the plant operates as specified in the manual or if no manual exists that it operates as you expect (for new plant & equipment this is often done by the manufacturer's representative on site).
- b. The functioning of any safety devices, guards or other engineering controls to ensure they work and are easy to operate.
- c. The functioning of safety controls which are not on the plant itself but assist to control hazardous events arising from the plant, e.g. gas monitors, smoke alarms, electrical safety switches, ventilation systems, sprinkler systems, access barriers.

## **Safe Operation**

(18) Instruction, training and supervision levels for each piece of plant must be determined and recorded in the Plant Risk Management Plan. High risk work involving plant and equipment listed in Schedule 3 of the OHS Regulations 2007 must have specific consideration and may not be undertaken without an appropriate licenced operator in control, unless the operator is under instruction by a licenced operator specifically for the purpose of learning to obtain their licence.

(19) Consideration for instruction, training and supervision must be given to:

- a. who will operate the plant,
- b. are there different levels of supervision and training required for inexperienced users and others,
- c. should a competency assessment be completed prior to allowing unsupervised or limited supervised access to the plant,
- d. how will competency be measured and recorded and by whom,

- e. what training is required and how will it be delivered
- f. should users of this plant be added to the register of trained and competent users.

(20) Plant risk management plans must be completed to identify hazards and risks involved in the use, maintenance, alteration, dismantling, storage and disposal of plant, how each hazard and risk will be controlled and what emergency situations may arise including appropriate emergency actions to control risks. Inspection and maintenance schedules must be recorded in the plant risk management plan.

(21) Safe operating procedures maybe required to ensure consistent, correct and consulted procedures are published. All safe operating procedures must address pre-start requirements, operational requirements and post-operation requirements leaving the plant in optimum condition for future use. When issues or faults are detected a tag out system must be used to ensure unsafe plant is not operated.

(22) All plant risk management plans and safe operating procedures must be created referring to user manuals and maintenance and inspection advice supplied by manufacturers and suppliers.

## **Inspection and maintenance**

(23) Plant requiring periodic inspection, testing, monitoring or maintenance, must be identified and records need to be kept. Safety devices and engineering controls are items that require inspection, testing and monitoring. A maintenance schedule must identify what maintenance is required, when it is required (according to the manufacturer or a competent person) and necessary legal requirements.

(24) Some inspections, testing and maintenance are specified in Australian Standards for specific plant, these timeframes and actions must be detailed in the plant risk management plan and complied with.

## **Isolation of damaged or unsafe plant or equipment**

(25) When a mechanical, physical or electrical hazard may exist then de-energise and lock out and tag out the equipment prior to general maintenance processes.

(26) All plant and equipment found to be faulty or damaged must be taken out of service using an established lock out and tag out system. An appropriate warning of phrase of either 'Danger' or 'Caution' with some description of the fault should be used to ensure any person intending to use, inspect or repair the plant or equipment is fully aware of the issue identified and when it was identified.

(27) Lock out and tag out must be completed following instructions in the [Lock-Out and Tag-Out Procedure](#).

(28) To return damaged or unsafe plant or equipment to service any repairs or alterations should be completed by a competent person and checks completed similar to commissioning. All repairs and alterations performed should be recorded in the plant risk management plan for the particular device.

## **Decommissioning and dismantling**

(29) Plant that is not in use must be stored in a manner such that it does not create a risk to workers or other people in the workplace and so that the plant is at minimal risk of damage or degradation. Plant that has been stored for extended periods must be recommissioned using checks similar to commissioning.

(30) Decommissioned plant that is to remain in the University must be isolated, tagged and 'locked out' to ensure it cannot be used until a full commissioning inspection and testing process has been followed.

(31) Decommissioning and dismantling of plant that is no longer required must be completed by competent persons and recorded on the plant risk management plan. Plant should be disposed of with consideration for the risk assumed

by the organisation if sold to another party or with consideration to environmental risks.

## Section 6 - Guidelines

(32) Nil

## Section 7 - Templates

(33) [Lock-Out and Tag-Out Procedure](#)

(34) Plant Pre-Purchase Checklist

(35) Plant and Equipment Register - pending

(36) Plant Risk Management Plan - pending

(37) Plant Risk Assessment template

(38) [Safe Operating Procedure template](#)

## Status and Details

<b>Status</b>	Historic
<b>Effective Date</b>	6th October 2015
<b>Review Date</b>	6th June 2018
<b>Approval Authority</b>	Vice-Chancellor
<b>Approval Date</b>	29th October 2015
<b>Expiry Date</b>	13th October 2016
<b>Responsible Officer</b>	Stuart Hildyard Chief Digital Officer and Executive Director Campus Services +61 3 9919 5576
<b>Enquiries Contact</b>	Muhammad Nofal Senior Health and Safety Advisor +61 3 9919 5593