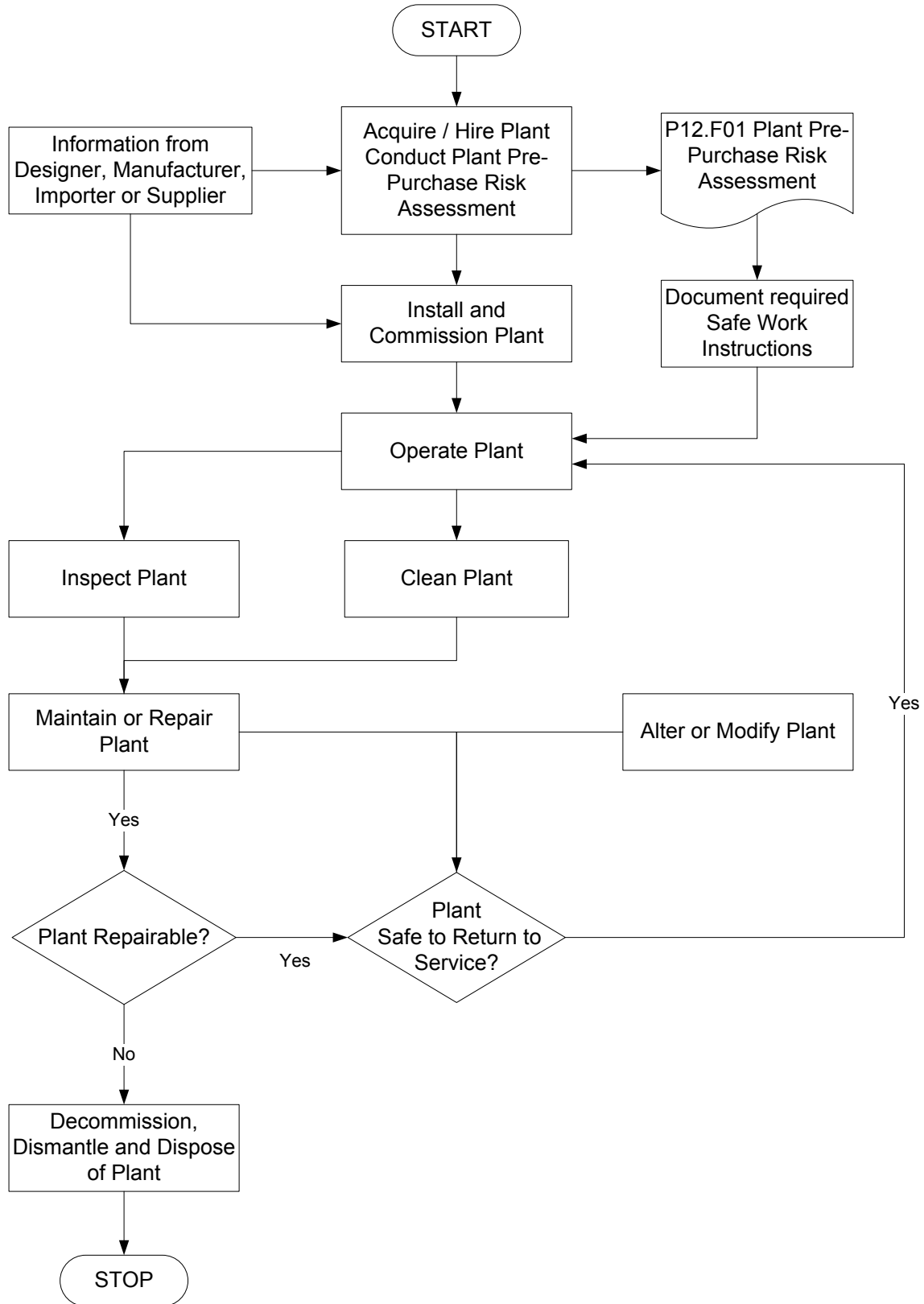


# MANAGING PLANT

## 1.0 SUMMARY / FLOWCHART



**2.0 RESPONSIBILITY**

<b>Organisational Level</b>	<b>Health and Safety Responsibilities</b>
<b>Level 1</b> ( <i>General Manager, Group Directors</i> )	Provide adequate resources to ensure that the requirements of this procedure are implemented.
<b>Level 2</b> ( <i>Section Manager, Unit Manager / Unit Co-ordinator, Project Manager</i> )	Ensure the effective implementation of the requirements of this procedure.
<b>Level 3</b> ( <i>Coordinator within a Unit, Team Leader, Supervisor, Ganger or Leading Hand or Operator</i> )	Ensure that all new, second hand, or hired plant has been subjected to a risk assessment prior to acquisition and that any required controls have been established, implemented and monitored.
	Ensure that all workers operating items of plant and equipment are suitably licensed, trained and competent prior to unsupervised use of the plant.
	Ensure that all required inspections, maintenance and cleaning of plant and equipment are undertaken by competent workers and that all identified discrepancies are corrected.
	Ensure that plant and equipment is used for tasks for which it is suitable and operated within the normal limits.
	Ensure that records of plant and equipment inspections, maintenance and cleaning are maintained in accordance with the requirements of P04 Document Control and Safety Records.
	Develop and document Safe Work Instructions for the maintenance, repair and cleaning of plant and equipment.
	Monitor compliance with established procedures and take action to correct non-compliance, when required.
	<b>Level 4</b> ( <i>Team Member, Operator Attendant, Trainee, Apprentice</i> )
Ensure that all workers operating items of plant and equipment are suitably licensed, trained and competent prior to unsupervised use of the plant.	
<b>Level 5</b> ( <i>Volunteer, Contractor, Other</i> )	Ensure that all workers operating items of plant and equipment are suitably licensed, trained and competent prior to unsupervised use of the plant.
	Ensure that plant and equipment is used for tasks for which it is suitable and operated within the normal limits.

### **3.0 PURPOSE & SCOPE**

#### **3.1 PURPOSE**

3.1.1 The purpose of this procedure is to define the processes implemented within Shoalhaven City Council (SCC) to ensure that any items of plant used in support of SCC's activities are, as far as reasonably practicable, without risks to the health and safety of any person.

#### **3.2 SCOPE**

3.2.1 This procedure applies to the acquisition, operation, inspection and maintenance of Plant that is owned, hired, or leased by SCC.

### **4.0 PROCEDURE**

#### **4.1 ACQUISITION OF PLANT AND EQUIPMENT**

##### **4.1.1 Purchasing**

4.1.1.1 Plant will be acquired in accordance with the requirements of P05 Procurement of Goods, including the inclusion of WHS requirements in purchasing specifications, and the verification of the purchased plant upon receipt.

4.1.1.2 During the acquisition of plant, any risks to health and safety will be identified prior to the acquisition of plant through the completion of a P05.F01 Plant Pre-Purchase Assessment or nominated web based assessment. This assessment will be based upon information obtained from the designer, manufacturer, importer or supplier of the plant.

4.1.1.3 When being supplied with plant SCC will take all reasonable steps to obtain the following information from the supplier or manufacturer of the plant:

- a) information regarding the installation, commissioning, decommissioning, use, handling, storage, and dismantling of the plant
- b) information regarding the hazards and health and safety risks arising from the use of the plant
- c) information regarding the inspections and tests to be carried out on the plant
- d) information regarding the safe systems of work and competency of operators required for safe operation of the plant
- e) information regarding emergency procedures to be followed in the event of a malfunction of the plant.

4.1.1.4 In the circumstance of SCC acquiring second-hand plant, the SCC will seek from the supplier of the second-hand

- plant, so far as reasonably practicable, identify any faults in the plant and provide written notice of the following:
- a) the condition of the plant
  - b) any faults identified, and
  - c) if appropriate, that the plant should not be used until the faults are rectified.
- 4.1.1.5 This assessment will be conducted by personnel having the authority to acquire the plant or equipment, in consultation with person/s who are competent in the operation of that plant, a cross section of plant end users and, where possible, the supplier.
- 4.1.1.6 The Plant Pre-Purchase Assessment will consider the following information provided by the supplier:
- a) the purpose for which the item of plant was designed or manufactured against the use that SCC intend for the plant
  - b) the results of any calculations, analysis, testing or examination
  - c) any specific conditions required for the safe operation of the plant
  - d) any alterations or modifications made to the plant
  - e) use of the plant, extending to the operation, maintenance, inspection, testing and cleaning of the item of plant.
- 4.1.1.7 The Pre-Purchase Assessment will also determine the following:
- a) any hazards and risks associated with the plant during installation, commissioning, operation, maintenance, repair, transport, storage and dismantling of the plant
  - b) any additional control measures required to be implemented by SCC to minimise the identified hazards and risks
  - c) the manufacturer’s recommendations relating to the type and frequency of inspections and maintenance required
  - d) any special skills and competency required for personnel to safely operate the plant or to safely undertake the required inspections and maintenance
  - e) any special conditions or equipment required to ensure the health and safety of personnel carrying out installations and commissioning, operation, inspections, and maintenance.
  - f) any alterations or modifications to be made to the plant prior to being placed into service.

- 4.1.1.8 The Pre-Purchase Assessment will also determine whether plant includes any or all of the following:
- a) any contact with or access to dangerous parts, moving or rotating, prevented using guarding and protective structures
  - b) the plant is of sturdy construction and tamper-proof design
  - c) there is no obstructions to the plant operator
  - d) the plant has fail safe operation
  - e) the plant is easy to inspect, maintain and clean
  - f) the plant does not introduce other hazards, for example, manual handling and excessive noise, into the workplace
  - g) the plant incorporates measures to minimise risks during use.
- 4.1.1.9 The Pre-Purchase Assessment will result in, and not limited to, the following:
- a) a recommendation to purchase or not, or any conditions to be met before the purchase of the plant would be further considered
  - b) the need for Safe Work Instructions for the installation and commissioning, operation, inspection, maintenance, transport, storage and cleaning
  - c) the need for additional licensing, certification, and training for workers
- 4.1.2 Hiring Plant and Equipment
- 4.1.2.1 When hiring equipment the supplier is to be advised that the plant or equipment will be subject to an inspection for basic safety.
- 4.1.2.2 For all truck and mobile plant hire, P12.F01 Plant Pre-Operation Checklist is to be completed. The completed form is to be handed to the supervisor of the work being carried out.
- 4.1.2.3 All other hired plant and equipment is to be visually inspected. Any plant or equipment that is rated as unacceptable due to a found fault is to be returned to the provider and not used until repaired. Although this plant or equipment is on hire it should still be made inoperable and tagged, if practicable.
- 4.1.2.4 Plant and equipment provided and directly supervised by a contractor is the contractor’s responsibility. If, however, workers are concerned as to the suitability of major plant they should report the matter to the site or project supervisor, who will then contact the Contract Manager for direction.

- 4.1.2.5 Should plant or equipment require repair or maintenance whilst being used, the plant or equipment is to be rendered inoperable (Locked Out & Tagged Out). The supervisor for the work is to be informed, the supplier contacted and arrangements made for repair/maintenance to be affected as soon as practicable.

## **4.2 INSTALLATION AND COMMISSIONING OF PLANT**

- 4.2.1 Installers and those responsible for commissioning plant and equipment will ensure the following:
- 4.2.1.1 Plant and equipment will be installed and commissioned by competent workers, having regard for the manufacturer's instructions and ensuring that any specialised tools, jigs and appliances necessary for the prevention of injury are used.
  - 4.2.1.2 Plant and equipment will be installed ensuring that the access and egress from the plant complies with the relevant standards.
  - 4.2.1.3 During installation, the stability of plant and equipment will be maintained.
  - 4.2.1.4 The installer will consider the interaction of the plant with people, work processes, and other plant.
  - 4.2.1.5 Environmental factors affecting installation and use are considered.
  - 4.2.1.6 Plant and equipment is positioned so that:
    - a) contact with hot plant or surfaces, or exposure to excessive radiant heat is controlled through restricted access, guarding and insulation.
    - b) there is sufficient space for safe access to plant for its operation, cleaning, maintenance, inspection and emergency evacuation.
    - c) the plant does not obstruct doorways and emergency exits.
    - d) the proximity to other plant does not impact negatively on the operation of the plant or work practices.
    - e) the plant is placed upon a suitable foundation so that the plant is stable and secure.
    - f) the ventilation is adequate to disperse any emissions from the plant.
    - g) workers and others are not exposed to noise levels exceeding exposure standards.

### **4.3 OPERATION OF PLANT**

#### **4.3.1 Licensing / Certification of Plant Operators**

4.3.1.1 A person performing high risk work will hold a relevant licence unless they are undergoing training while supervised.

4.3.1.2 Schedule or work requiring qualifications, certification of competency, or high risk work licences, include the following:

- a) Scaffolding (over 4 metres)
- b) Operation and use of cranes
- c) Dogging
- d) Rigging
- e) Operation and use of hoists
- f) Fork Lift Truck
- g) Operation and use of explosive powered tools
- h) Operation and use of Skid steer / Bobcat
- i) Operation and use of excavators

#### **4.3.2 Roads & Maritime Service Licensing**

4.3.2.1 LR, MR, HR vehicle license class - based on the GVM, to operate trucks, implements on public roads

4.3.2.2 The correct license class based on the equipment GVM is required before load shifting machines are taken on public roads.

4.3.3 Workers who are required as part of their current employment to obtain a SafeWork NSW Certificate of Competency or RMS Licence will be provided with all required training and practice to successfully complete their assessment, under the supervision of a qualified person.

#### **4.3.4 Works not requiring certification**

4.3.4.1 Workers will undergo SCC training in the safe operation of plant and be assessed as ‘Competent’ or ‘Not Yet Competent’ by a person who is suitably competent / experienced in its operation.

4.3.4.2 The safe system of work requirements for the equipment will be explained and demonstrated during training, including the risk assessment for the plant.

4.3.4.3 As part of training, the worker will physically demonstrate to their instructor or supervisor the safe operation of the equipment.

4.3.4.4 A worker will wear and/or use all personal protective equipment relevant to the equipment being used.

4.3.4.5 Such training is to be verified by the supervisor before allowing a worker to use any equipment.

#### **4.3.5 Basic safety of Plant and Equipment**

- 4.3.5.1 Refer to relevant SWMS/SWI.
- a) Where required, complete the appropriate checklist which may be located on the WHS intranet site under 'Inspections' or available in booklet form. Checklists include, but are not limited to:
- i. Daily Inspection Checklist- pre-operational Inspection Checklist,
  - ii. Site specific checklist
  - iii. Manufacturers checklist
  - iv. Delivery checklist
  - v. Commissioning checklist
  - vi. Traffic Control Checklist
- 4.3.5.2 Portable and hand held equipment should be checked prior to use for damage to leads, hoses, casings, etc.
- 4.3.5.3 Any item of plant or equipment inspected that is rated U/A (unacceptable) due to a fault is to be immediately made inoperable to prevent any accidental or deliberate starting. If practicable, Do Not Operate tags should be attached to the plant or equipment by the worker who identified the fault. Tags can be obtained from the SCC Store and will be carried with the equipment.
- 4.3.5.4 After the equipment is made inoperable, the supervisor is to be informed and arrangements made for the equipment to be repaired as soon as possible by a qualified repairer for that piece of plant or equipment.
- 4.3.5.5 Managers and Supervisors are to ensure faulty or damaged plant is not used under any circumstances in all instances that equipment is found to be unacceptable for use it is to be taken out of service.
- 4.3.6 Alteration of Plant
- 4.3.6.1 All alterations to plant are to be requested by supervisors then approved and managed by fleet management
- 4.3.6.2 SCC recognises that any alterations made to plant will result in SCC assuming the responsibilities and obligations of a designer or manufacturer.
- 4.3.6.3 SCC will contact the designer or manufacturer of plant prior to undertaking any alteration of the plant
- 4.3.6.4 After market accessories will be assessed for suitability and compliance to manufacturer requirements and fitted by competent persons.
- 4.3.6.5 Where the designer or manufacturer of the plant cannot be contacted, alterations will be completed by a competent person in accordance with relevant technical standards.



- 4.3.6.6 Where plant requires design registration, the altered design will be registered if the alteration impacts health and safety.
- 4.3.6.7 Prior to the commencement and during alteration work, the plant will be isolated from energy sources and made unable to be switched on or activated inadvertently.
- 4.3.6.8 Altered plant will not be returned to service until appropriate control measures are identified and implemented, and the plant has been inspected and tested.
- 4.3.7 Inspection of Plant and Equipment
  - 4.3.7.1 The inspection and testing of plant and equipment will be carried out in accordance with P20 Inspection, Testing, and Monitoring.
- 4.3.8 Maintenance, Repair and Cleaning of Plant
  - 4.3.8.1 Plant and equipment will be maintained, repaired and cleaned in accordance with the manufacturer's recommendations and instructions.
  - 4.3.8.2 Where the manufacturer's recommendations and instructions are not available, plant and equipment will be maintained, repaired and cleaned in accordance with the recommendations made by a competent person.
- 4.3.9 Return of repaired or modified plant or equipment to service
  - 4.3.9.1 A record of any inspection, maintenance, repair or alteration to plant is to be retained in accordance with P04 Document Control and Safety Records, plant or equipment being returned to service after being repaired or modified, a competent person will verify that the plant or equipment is safe for use. This competent person will advise the supervisor that any tag that may have been attached to identify a fault, may now be removed. This certification, where applicable, should be recorded on the P12.F01 Plant Pre- Operational Checklist.
  - 4.3.9.2 The supervisor will subsequently advise the worker, who attached the tag that it is now safe to remove. Where no tag is attached, the supervisor will advise the worker that the equipment is now safe to use.
- 4.3.10 Decommissioning, Dismantling and Disposal of Plant
  - 4.3.10.1 Where plant or equipment is sold the person/s receiving the plant or equipment will, where possible, be provided with copies of maintenance records, manufacturer's instructions and any approvals relating to the use of the plant.
  - 4.3.10.2 Where plant does not meet current standards or legislative requirements, or has been subject to

prohibition notices, or is unsafe for use, the plant will be rendered inoperable., .

#### **4.4 SPECIFIC CONTROLS**

##### **4.4.1 Guarding of Dangerous Parts**

4.4.1.1 The Designer of Plant will ensure that guarding is fitted to plant to prevent the ejection of materials and access to hazardous parts and that guarding complies with legislative requirements and the requirements of the relevant Australian Standards.

4.4.1.2 The Manufacturer of plant has a responsibility to ensure that guarding required by the plant design is fitted and that the requirements of the design, legislation and Australian Standards are met.

4.4.1.3 SCC will consider the compliance and adequacy of guarding of dangerous parts in the decision to acquire plant.

4.4.1.4 Guarding will be inspected at the specified frequencies to ensure that it is fitted, and remains fitted, in such a way as to ensure the guarding itself does not become a hazard.

4.4.1.5 Physical guarding fitted to plant will be secured in such a way to allow removal only with tools except where guards are required to be removed for regular maintenance, guarding will be secured with fastening devices not requiring tools for removal provided the plant is fitted with interlocking devices preventing operation of the plant with the guard removed.

4.4.1.6 The operation of interlocking devices and emergency stops will be tested during routine maintenance operations, in accordance with manufacturer's recommendations and prior to machine start up during routine start up checks.

4.4.1.7 Guarding will be inspected prior to operation of any plant or equipment in accordance with P20 Inspection, Testing, and Monitoring.

4.4.1.8 Any defects to guards are to be reported to your supervisor, the machine is not to be operated until the defective guard is repaired and refitted to the equipment.

##### **4.4.2 Operator Controls**

4.4.2.1 Plant will include operator controls that:

- a) Are clearly identified
- b) Located in such a way to be readily operated by persons using the plant
- c) Are guarded or located to prevent unintentional operation

- d) Are able to be locked in the off position, or the plant is provided with power isolation to enable disconnection of all motive power and forces.
- 4.4.2.2 Where the plant or equipment has multiple points of control, controls will include “stop and lock off” function requiring each control point to be reset prior to reactivation of controls.
- 4.4.3 Emergency Stops
  - 4.4.3.1 The Designers of plant have a responsibility to incorporate emergency stops into the design of plant. The function, identification, placement and accessibility of emergency stops will be as specified by legislation and relevant Australian Standards.
  - 4.4.3.2 Manufacturers of plant have a responsibility to include emergency stops as required by the design.
  - 4.4.3.3 SCC will consider emergency stops as part of the acquisition decision for plant.
  - 4.4.3.4 Emergency stops, where fitted, will be inspected, tested and maintained.
  - 4.4.3.5 Warning devices will be provided and maintained where supplied by equipment suppliers or mandated by the WHS Regulation 2011 or the relevant parts of Australian Standards, such as AS4024.1 Safety of Machinery.

#### 4.5 RECORDS

- 4.5.1 All records generated as a result of the operation of this procedure will be managed in accordance with the requirements documented within P04 Document Control and Safety Records.

#### 5.0 REFERENCES & ASSOCIATED DOCUMENTS

- 5.1 Work Health and Safety Act 2011
- 5.2 Work Health and Safety Regulation 2011
- 5.3 How to manage work health and safety risks: Code of practice 2011
- 5.4 Work health and safety consultation, cooperation and coordination: Code of practice 2011
- 5.5 Managing the risks of plant in the workplace: Code of practice 2014
- 5.6 Managing electrical risks in the workplace: Code of practice 2015
- 5.7 Confined Spaces: Code of practice 2011
- 5.8 Managing the risks of falls: Code of practice 2011
- 5.9 Welding processes: Code of practice 2014
- 5.10 Demolition Work: Code of practice 2015
- 5.11 Excavation work: Code of practice 2015

- 5.12** How to manage and control asbestos in the workplace: Code of Practice 2011
- 5.13** How to safely remove asbestos: Code of Practice 2011
- 5.14** AS 4024.1:2014 Safety of machinery
- 5.15** AS/NZS 2865:2009 Safe work in Confined Spaces
- 5.16** AS/NZS 1891.4:2009 Industrial Fall Arrest Systems – Selection, use and maintenance
- 5.17** AS 4084:2012 Steel Storage Racking
- 5.18** AS 1473:1991 Guarding and safe use of woodworking machinery
- 5.19** AS 4024.3610:2015 Conveyors – General Requirements
- 5.20** National Self-Insurer OHS Audit Tool 2014
- 5.21** P04 Document Control and Safety Records
- 5.22** P20 Inspection, Testing and Monitoring
- 5.23** P12.F01 Plant Pre-Operation Checklist
- 5.24** P12.F02 Crane Pre-Operation Inspection Checklist Log book
- 5.25** P12.F03 Forklift – Daily Inspection Checklist

**APPENDIX 1 DEFINITIONS**

<b>Certificate of Competency</b>	A Certificate of Competency issued under WHS Regulation 2011.
<b>Competent Person</b>	Means a person who has acquired through training, qualification, or experience, or a combination of these, the knowledge and skills enabling that person to perform the specified tasks.
<b>Crane</b>	An appliance intended for raising or lowering a load, and moving it horizontally
<b>Dogging</b>	The application of slinging techniques, including the selection or inspection of lifting gear, to safely sling a load The directing of a crane operator or hoist operator in the movement of a load is out of the operators view
<b>Hand-held Powered Tool</b>	Any mechanical implement held by hand which has a power source other than manual effort to provide its normal operating force.
<b>GVM</b>	Gross Vehicle Mass
<b>Load shifting machine</b>	A dragline, excavator, forklift truck, front-end loader, front-end loader backhoe, front-end loader of the skid steer type or order picking fork-lift truck
<b>Operator Protective Devices</b>	Includes roll over protective structures, falling object protective structures and seat belts.
<b>Plant</b>	Includes any machinery, equipment (including scaffolding), appliance, implement or tool and any components or fittings or accessories to them. Construction and maintenance equipment. Can be either fixed or mobile. Not including cars and utes
<b>Qualified Person</b>	In relation to plant operation means a person who holds a Certificate of Competency for nominated plant or tasks.
<b>Rigging</b>	The exercising of direct control of the movement of equipment and associated gear necessary for the purpose of: <ul style="list-style-type: none"> <li>• Setting up or dismantling a crane or hoist, or similar plant configured for operation as a crane or hoist, or</li> <li>• Placing or securing plant or a load relating to, and including the structural members of, a building or structure, or</li> <li>• Ensuring the stability of the structural members of a building or structure.</li> </ul>
<b>Training</b>	A structured system of training ensures individuals receive appropriate and relevant WHS information, instruction and supervision and are assessed as competent by a qualified person before they are expected to carry out the responsibilities of their job.